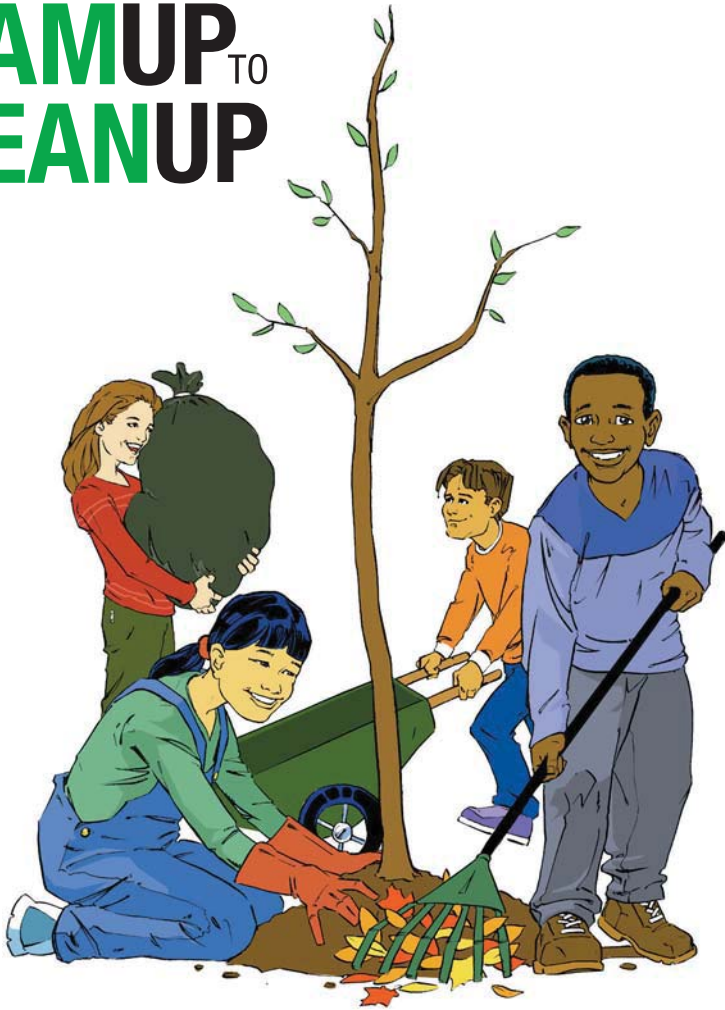


**TEAMUP**<sup>TO</sup>  
**CLEANUP**



Citywide Winner  
Intermediate Division

**Evergreen MS for  
Urban Exploration**

# 2015 GOLDEN APPLE AWARDS

This certificate is awarded with the sincere appreciation and esteem of a grateful Department and City in recognition of your school's efforts to help make New York City shine.



City of New York  
Department of Sanitation  
Bureau of Recycling and Sustainability  
[nyc.gov/recycle](http://nyc.gov/recycle)

**NYC**  
Recycles

# 2015 Golden Apple Awards Contest Entry Judging Info

(This sheet prepared for judges' use by DSNY BRS)



**ID Info:** 15035  
**School:** Evergreen MS for Urban Exploration  
**Grade Division** IS  
**Borough:** K  
**Affiliation:** DOE

(for borough Master School Composter)

**Cash Prize** \$10,000  
**Team Up to Clean Up Award**  
Citywide IS & Borough Winner

**Golden Shovel Award**

## Team Up to Clean Up

### The Ever-Green Team of Evergreen Middle School

The school created a Green Team who constructed a garden of native pollinators, vegetables, and herbs; and registered with GrowNYC Recycling Champions to enhance the school's recycling program. Evergreen completed Earth Day and Anti-Litter Campaigns, creating posters and placing them in local bodegas to raise awareness of sustainability issues within the community. The new student-led Green Team worked with Science and ELA classes to create an interactive outdoor learning space for students to engage with their environment, learn to appreciate nature, and participate in interdisciplinary learning.

#### Weblink final

[http://www1.nyc.gov/assets/dsny/downloads/pdf/golden-apple-awards/GA15\\_TU\\_IS\\_K\\_K562\\_Evergreen\\_entry.pdf](http://www1.nyc.gov/assets/dsny/downloads/pdf/golden-apple-awards/GA15_TU_IS_K_K562_Evergreen_entry.pdf)

**School Population: total #** 330

**Core Group:** 24  
**Total Participating:** 56

#### Prior Year Entries:

first entry

#### Current Entries

15:TU-C

#### Collaborations

- NYC Organics Collection
- NYC Compost Project
- GrowNYC RCP
- GrowNYC Grow To Learn
- MFTA
- NWF Eco-Schools
- NYRP MillionTreesNY
- NYRP Rose
- Citizens Comm for NYC

#### School Contact Information:

**Phone:** 718-455-0180

**Address:** 125 Covert St  
Brooklyn

**Block&Lot:** 3034160001

**DOE Location:** K562

**DOE Bldg:** K296

11207

**Contest Coordinator:**

Emily Thurston

**Principal:**

Lauren Reiss

**Sustainability Coord:**

Emily Thurston, Teacher, AfterSchool

**Custodian:**

Matthew Naughti

# The Ever-Green Team of Evergreen Middle School



I joined the Green Team because ...



*Sustainability Committee*

“Now I see the secret of making the best person: it is to grow in the open air and to eat and sleep with the earth.”

~ Walt Whitman

**Golden Apple Award Application: Cleanup and Gardening Projects**  
**Evergreen Middle School, 125 Covert St., Brooklyn 11207**  
**Phone: 718-455-0180 / Fax: 718-455-4381**  
**Lauren Reiss, Principal**

**I. Project Implementation**

**A. Purpose of Project**

The purpose of our project was to organize a student-led Green Team and to create an interactive outdoor learning space for students to engage with their environment, learn to appreciate nature, and participate in interdisciplinary learning. From the beginning, the goal was to involve students in the planning and implementation of Green Team activities in order for students to take pride and ownership over the project as well as their community. The garden was also meant to empower our most vulnerable populations. Approximately a quarter of our students are current or former English language learners, and we also have a large cohort of students with disabilities. We wanted to create a space that would inherently provide a universal design for learning framework, one in which our students would be able to participate fully using multiple modalities while building language skills. Finally, we approached this project as a social justice initiative. Our school is located within a food desert, and we wanted to educate our students on the topics of nutrition, plant life, and the interdependence of ecosystems.

It is our hope that, once the garden is fully established, teachers from all disciplines will use the garden to conduct interactive lessons. The clean-up component of our project, which includes an awareness campaign as well as a recycling program, will not only ensure that our garden and school remain beautiful, earth-friendly places, but will also teach students about sustainability and respect for the environment. Overall, our project has the potential to engage and motivate our diverse population of students. We are committed to building a stronger school community and neighborhood.

**B. Accomplishments: A Before and After Tour**

Before: Evergreen Middle School is one of three schools located within a 157,000 sq. ft. cement building at the cross section of Covert Street and Evergreen Street in Bushwick, Brooklyn. The Green Team proposed to construct a school garden along the exterior corridor between the asphalt playground and the school. This areaway is approximately 7.5 feet in width and 275 feet in length, running parallel to Evergreen Street.





*During:* In November, the Green Team staff developed a grant proposal to construct our garden. We submitted this proposal to the Nature Conservancy and were awarded the “Nature Works Everywhere” grant in December 2014 for \$2000. Through student and staff collaboration, we proceeded to construct four double-raised beds and one square frame. While conducting interschool outreach, we also obtained donations of three additional beds and four circular containers. In February 2015, we were granted admission to the NYC Edible Schoolyards Spring Intensive. By the end of March 2015, the Green Team had assembled the necessary components of our garden infrastructure. Along the way, we established connections with Grow to Learn NYC, GreenThumb, and Edible Schoolyards to build staff knowledge and acquire resources and garden curriculum. As we finished our planting throughout the last week of April, we completed our anti-litter campaign. Students used repurposed wallpaper to create posters encouraging their community to take care of the school and the Earth. The students distributed these posters to bodegas in the immediate vicinity of the school.



*After:* In the 2014-2015 school year, we created a school-wide Green Team, constructed a garden of native pollinators, vegetables, and herbs, and registered with Recycling Champions to bring the recycling of paper and plastics to our middle school. Our Community Clean-up and Energy Reduction programs remain in a nascent phase. We have not yet begun tracking school-wide energy consumption or the impact of our anti-litter campaign. However, we encourage staff reduction of energy use by unplugging Smartboards, computers, printers, and other appliances when they are not in use. Now that the weather is warmer, we will also be spending more time cleaning up the streets and encouraging local business owners to post our signs.

**C. Project planning:**

For the first several months of the school year, the Sustainability Coordinators discussed Evergreen Middle School's 2014-2015 goals and objectives for the Sustainability Committee. We conducted school-wide outreach to build staff membership. In November 2014, the nine staff members of the Sustainability Committee agreed upon its core values: environmental integrity, environmental stewardship, and promoting social and economic equity.

We determined that the school would benefit from three separate initiatives: 1) a clean-up/recycling/reuse program, 2) a school garden, and an 3) energy reduction program.

All three initiatives were to fall under the umbrella of a student and staff “Green Team.” We determined the following objectives for the inaugural year of the Green Team:

1. Secure funding for our initiatives and document mistakes and achievements
2. Organize a school-wide Green Team and establish regular meeting times for both staff planning and club activities
3. Involve Green Team students in all components of gardening, recycling, and energy reduction
  - Implement a fully operational gardening program by early Spring 2015
  - Implement a fully operational recycling program by summer 2015
  - Implement a fully operational energy-reduction program by early winter 2015

We also developed a mission statement for our garden:

In the Ever-Green Garden, we strive to create:

- a place of refuge for our students to feel calm, safe, and happy.
- a place of student and community empowerment, stimulated by an expanding awareness of environmental sustainability and social capital.

In the Ever-Green Garden, we endeavor to:

- build academic integrity through interdisciplinary inquiry and discovery.
- gather in celebration of culture and identity and the appreciation of nature.
- enhance the nutritional wealth of our community by developing a sustainable food system of organic herbs, fruits, and vegetables.

In January 2015, the Green Team staff began to meet regularly during our Wednesday lunch periods to organize student recruitment. Green Team student-staff meetings commenced in February with 24 students on our roster. Throughout the spring, the staff continued to meet during Wednesday lunch periods to share information obtained at workshops, as well as to plan our Build Days and discuss next steps.

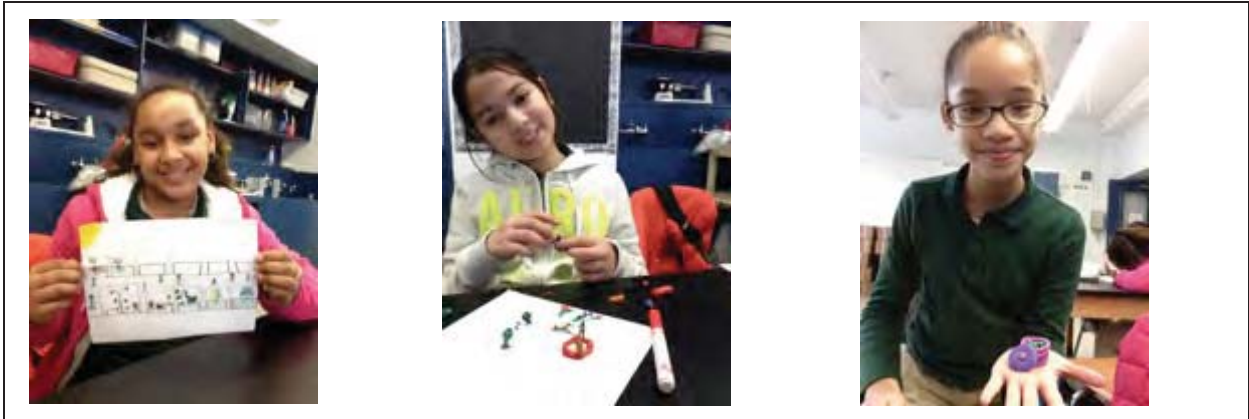
#### **D. Student Involvement.**

Approximately 24 Green Team Students and 32 students in Science and ELA classes were actively engaged in all facets of garden planning, construction, and planting. We gathered for the first time with students on Friday, February 13, 2015, from 2:35-4:00. At this first meeting, students shared their vision for our garden. They discussed which herbs and vegetables they would like to plant. They illustrated diagrams and made clay models of their garden plans. Due to space limitations, we were forced to commit to specific raised bed dimensions, but we gave students the responsibility of conducting a poll to determine the colors that we would use to paint each structure.

Students were full participants during the Build Days. While adults handled the drilling equipment, students used the levels and clamps to ensure that bed frames were properly aligned. They manually screwed the planks of lumber together before an adult secured each bed with the drill. Students also painted each of the frames using the color of their choice.

To enhance ownership of the garden, Green Team Students devised a set of safe gardening rules and assigned responsibilities for the care and maintenance of tools.

Upon receiving a free shipment of soil from GreenThumb, the students individually transported the soil in buckets from the delivery pile to the raised beds. Once the beds were primed for direct sowing, the students measured the plots, divided them into planting grids, and demarcated each bed with twine. Finally, after a short demonstration on planting to maximize crop yield, the students sowed the beds under teacher supervision.



**Garden Planning: What is a school garden? What should our garden look like?**



**Garden Construction: Using levels, clamps, and screwdrivers**



**Garden Construction: Painting**



**Garden Preparation: Transferring soil and Developing Rules**



**Garden Preparation: Measuring and marking our beds**



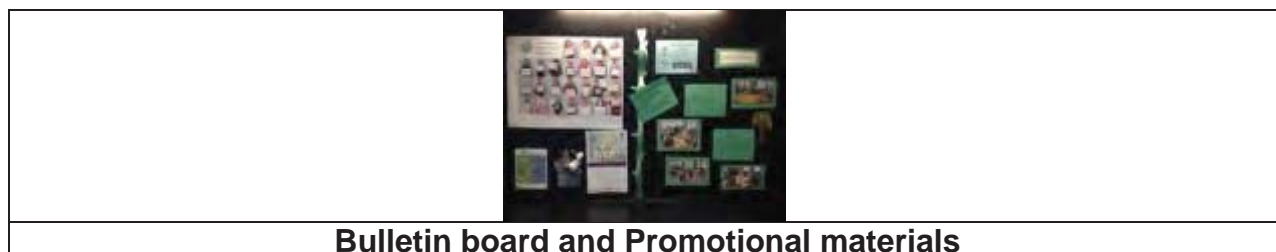
**Gardening: Sowing the Seeds**



### E. Promotion.

Promoting the Green Team is a work-in-progress. We decided to recruit through word-of-mouth due to the good rapport that we have established between teachers and students. We created a collage (*See our cover page.*) to represent the Green Team, and we designed a bulletin board to publicize our goals and activities.

In the future, our garden harvest days will be a way to conduct community outreach. For now, the focus is on tangible and edible results. As our garden grows, however, the Green Team will strive to develop a media presence. Through online documentation, we will share the process of establishing a gardening routine and building our knowledge.



### F. Collaboration.

To become familiar with best practices and to support our planning efforts, Green Team Staff members have attended Grow to Learn NYC, Edible Schoolyard NYC, and GreenThumb workshops and trainings throughout the 2014-2015 school-year. We have also garnered soil, lumber, seeds, and seedling donations from these organizations.

To decorate our garden and construct the posters for our Anti-Litter Campaign, we registered with the nonprofit, Materials for the Arts (MFTA) and scheduled visits to its warehouse to collect supplies. We will also use repurposed materials from MFTA to decorate our garden and create interactive garden curriculum.

The table below indicates the trainings attended by Green Team Staff.

Training, Workshop, or Event	Date
GreenThumb: building compost benches	October 4, 2014
DOE: Sustainability Coordinators Training	October 14, 2014
Grow to Learn: garden planning	October 15, 2014
DOE: Sustainability Coordinators Training	November 5, 2014
Grow to Learn: building raised beds	November 13, 2014
Edible Schoolyard Spring Intensive	February - April, 2015 (6-week course)
DOE: Sustainability Coordinator Gathering	April 22, 2015
Impact Hub NYC: Educators Inspiring Sustainability and Justice	April 22, 2015
Citizens Committee for New York City: Build a rain harvesting system	April 25, 2015
Grow to Learn: Creating Habitat for Native Pollinators in School Gardens	April 29, 2015

The Green Team Staff has already registered for the following workshops and remains motivated to become more knowledgeable about gardening practices and sustainability issues.

<b>Training, Workshop, or Event</b>	<b>Date</b>
Grow to Learn: Student-Led Composting - Tuesday, May 12, Columbia Secondary School for Math, Science, and Engineering	May 12, 2015
GreenThumb: Rainwater Harvesting at School	May 14, 2015
GreenThumb: Worm Composting	May 20, 2015
Grow to Learn Weekend Workshop at Governor's Island Teaching Garden	June 13-14, 2015

### **G. Educational components**

While working on the garden, the Green Team learned about soil, recycling, ecosystems, and global climate change. We used short sections of the Nature Conservancy's curriculum: "How Dirt Works" and "Garden Activity Guide: Living Systems."

Science teachers also incorporated several lessons into their curriculum. Below is their sample lesson on protecting the environment by reducing waste.

**Learning Target:** IWBAT recycle paper in my classroom and explain the importance of protecting the environment.

**NYC Science Scope and Sequence Learning Standards:**

**7.1a, 7.1b**

Human influences on the environment: positive influences.

**7.1c, 7.2a, 7.2b, 7.2c**

Human influences on the environment: negative influences.

**7.3a, 7.3b**

Human influences on the environment: decision making (risk/benefit).

**LE 3.2b, LE 7.1e, LE 7.2c,d, ICT 1.2, 1.4, 2.1-2.3, 4.1, 4.2, 5.1, 5.2, 6.1, 6.2, IPS 1.1-1.4, IPS 2.1**

Environmental concerns; acquisition and depletion of resources; waste disposal; land use and urban growth; overpopulation; global warming; ozone depletion; acid rain; air pollution; water pollution; impact on other organisms.

**LE 6.1c**

Renewable and nonrenewable sources of materials.

**PS 3.1b,c**

Observe and describe physical properties of objects using all appropriate senses: size, shape, texture, weight, color, etc. Determine whether objects are alike or different.

**Materials Needed:** PPT, handout, paper bags, plastic spoons, soft plastics, looseleaf paper, printer paper, clean paper towel, dirty paper towel, gum, bread, ziplock bags.

**New Vocabulary:** Recycling, waste, global warming, landfill, compost

**Modifications and Accommodations:**

1. Graphic Organizer

2. Visual Aids
3. Explicit review of procedures/directions/checklist
4. Sentence Starters
5. Directions read out loud
6. Small group work
7. 1:1 check in with DB, WM, AA, and CV
8. Use of manipulatives

Agenda Item	Activity Description	Co-teaching Format/Notes
Do Now 5 min	<p>Students receive direction: Brainstorm <u>1 way</u> you can think you can help fight global warming. Students use sentence starter on their handout: "I can fight global warming by..."</p> <p>Teachers provide timing reminders and positively frame, pointing out groups they see working before leading the discussion by getting 3-4 student responses and showing examples on the PPT.</p>	Team Teaching: <ul style="list-style-type: none"> <li>• AR reads directions</li> <li>• LD gives timing reminders</li> <li>• Both positively frame.</li> <li>• Rio supervises struggling students at DM's group.</li> <li>• AR facilitates Do Now responses and shows examples on PPT.</li> </ul>
Recycling Trivia 10 min	<p>Students are presented with four trivia multiple choice questions. For each question, the first student to raise their hand will answer. Students can only raise their hand after the question is read.</p> <ol style="list-style-type: none"> <li>1. What percentage of waste in NYC schools can be recycled or composted? (90%)</li> <li>2. How much money does NYC spend every year transporting landfill to other states? (\$300 million)</li> <li>3. How many pounds of trash does the average American throw away every day? (4.4 lbs)</li> <li>4. Americans make up 5% of the world population. What percentage of the world's trash do we throw away? (30%)</li> </ol> <p>After each question, teachers will explain the connection between the trivia question and human impact on the environment.</p>	Team teaching: <ul style="list-style-type: none"> <li>• AR will explain directions for activity.</li> <li>• AR and LD will take turns reading the trivia questions and explaining supplemental information.</li> <li>• AR and LD will both circulate and make sure students are circling the correct answers on their papers.</li> </ul>
Group Work: "Sort It Out!" 20 min	<p>Teacher will read out the directions, show directions, and explain the activity.</p> <ol style="list-style-type: none"> <li>1. Separate the items in your bag into two groups: Classroom Recycling and Classroom Trash.</li> <li>2. Raise your hand when you finish.</li> </ol>	Team teaching: <ul style="list-style-type: none"> <li>• LD will explain the activity while AR holds up materials for students to see.</li> <li>• Both teachers will</li> </ul>

	<p>3. When you get permission, write or draw the items in your graphic organizer.</p> <p>Students will work with their groups to sort their items (paper bags, plastic spoons, soft plastics, looseleaf paper, printer paper, clean paper towel, dirty paper towel, gum, bread, ziplock bags) and fill in the graphic organizer.</p> <p>Once most groups are finished, teachers will review by holding up each item and checking for understanding.</p>	<p>circulate and help groups.</p> <ul style="list-style-type: none"> <li>• Both teacher will check group work and give groups the “OK” to go ahead and complete the graphic organizer.</li> <li>•</li> </ul>
<p>CFU - Turn &amp; Talk</p> <p>8 min</p>	<p>Students discuss the quote, <i>“We do not inherit the Earth from our ancestors; we borrow it from our children”</i> with their partner for 2 minutes WITHOUT WRITING their answers. Teachers call on 2-3 pairs to share what their partners said, giving praise to students for their ideas.</p> <p>After the discussion, students will write their response in the sentence starter provided: “I think this quote means... because...”</p>	<p>Team teaching:</p> <ul style="list-style-type: none"> <li>• LD reminds students of T&amp;T protocol.</li> <li>• AR calls on pairs of students to share responses.</li> <li>• Both teachers circulate, ask students questions, and keep them on track.</li> <li>• Both teachers praise student work and ideas, and both positively frame.</li> </ul>

**Work samples:** On Earth Day, students created the following posters to spread awareness about recycling and protecting the environment.







## II. Project Analysis

### A. What worked?

The main success of the project has been building a community for students. The garden has given English language learners and students with disabilities the opportunity to work with their hands to make a beautiful space for the entire school. This has been a tremendously empowering experience. Above all, the Green Team has encouraged students to feel successful and proud of their achievements. Students on the Green Team feel that they are part of a club that is improving their community. After cleaning and planting seeds in the garden, one student said, "Can I do it again? That's the thing that makes me happy." He continued, "I feel like I'm finally part of something that means something to somebody."

The project has also been truly collaborative for both students and adults. Nine staff members created a safe space for students, contributing tools, knowledge, and time. They ultimately laid the groundwork for students to take ownership of the garden. Not only has the garden fostered student interest in sustainability, ecology, and gardening, but Green Team students have also been involved and proactive at every stage of project development. Students built beds, painted garden structures, and initiated planting. Now, students consistently discuss promoting community involvement and raising awareness. They are very protective of the garden they have built and cared for, and they want their family members to become involved.

### B. What didn't work?

Our Green Team has faced several organizational challenges inherent to starting a large-scale project from scratch. With a relatively inexperienced staff, implementation of our project occurred incrementally, often through trial-and-error. For example, we slowly learned how to place purchase orders through the DOE, plan our Build Days, determine planting schedules, and organize and communicate among Green Team members.

Insufficient time was our principal constraint. The project could have been more systematic. However, since students and teachers, alike, were eager to begin planting, we spent more time constructing the garden than on pedagogy. Now that we have our infrastructure in place, we are motivated to create curricular resources. Next year, we will be more systematic about teaching students the fundamentals of plant growth and informing them about the processes that they are engaging in and witnessing. We want our students to learn about the plants in the garden, to sprout seeds before planting, and to understand the garden's ecological importance.

Another unsuccessful aspect of the project was that the students were not provided with the opportunity to develop the Green Team goals. To foster student leadership and self-efficacy, next year we will involve students more directly in researching issues and choosing the objectives of our school-wide initiatives. We will continue to scaffold these processes for our students so that we can achieve this goal.

We are committed to learning from our experiences this year and continuing to promote the Green Team as a student-led club while improving sustainability at Evergreen.

### **C. Applicability to other schools.**

The most important piece of advice would be to recruit a strong core of staff members who are passionate about the project and willing to devote time to planning and implementing it. Our Green Team staff members are highly motivated and work well together to strategize and problem-solve.

The strong core is also important for recruiting, maintaining, and nurturing a dedicated group of Green Team students. It is important that this group has (or develops) strong relationships with members of the administration and school maintenance staff. Through every step of this process, from ordering supplies to constructing garden beds, cooperation and communication amongst the different departments of the school has been essential.

Another important piece of advice would be to take advantage of outside resources. Schools have access to a wealth of knowledge and materials that will prove useful in facilitating the planning and implementation process. Working with a variety of nonprofit organizations like the Nature Conservancy, Grow to Learn NYC, GreenThumb, Recycling Champions, Materials for the Arts, and Edible Schoolyards has provided our Green Team staff and students with essential resources, including professional development and curriculum. These resources have helped immensely throughout the entire scope of this project.

### **D. Measuring success.**

This project has undoubtedly had a positive impact on the students who participate in Green Team activities and on the student body as a whole. Many students on the Green Team have not only been exposed to environmental and sustainability issues, they have become green advocates, educating their peers on the importance of recycling and waste clean-up through our awareness campaigns. The biggest success of our project has been building a community of students who are passionate about nature and the environment and exposing

students to new information and skills through interactive and experiential learning opportunities.

One way that the Green Team teachers measured student learning was through curriculum implementation. This spring, Green Team teachers planned and implemented two lessons on soil. During the first lesson, an introduction to soil in March, we asked students to write down why soil is important. Only two students out of the twenty present understood the importance of soil. After two lessons and after several hands-on activities, including planting seeds and seedlings, all of our Green Team members understood the important role of soil in our garden ecosystem. This is just one example of how our project has exposed students to new knowledge and experiences. For many of our students, planting and caring for the garden was a new experience. Building on their interests, they gained valuable skills in listening and responsibility.

Another way we measured success was by tracking how teachers and students incorporated the garden into their curriculum. This spring the entire sixth grade is reading *Seedfolks* by Paul Fleischman, a story about a community garden. ELA teachers held lessons in the garden, and some classes had the opportunity to plant seeds. Our garden provided a novel opportunity for experiential learning and interdisciplinary connections.

We hope that as the weather becomes warmer, more teachers will use the garden as a place to conduct their lessons. So far, in the two months that our garden has been operational, classes in sixth, seventh and eighth grade in the content areas of ELA, ESL and Science have incorporated the garden into their curriculum or held class in this space. Approximately seventy students have already benefited from this inviting and welcoming learning environment, and these numbers will surely grow as our garden blooms in the coming weeks.

### **E. Future plans.**

The Green Team has several plans for the application of prize funds.

1. Green Team recognition: t-shirts, totes, and water bottles for our team (\$1000)  
We often give verbal praise to our students, but we would like to show them our appreciation in a way that will both resonate with our values and strengthen our sense of community. With reusable bags and bottles, students will be able to lead by example, championing our school's reduction of waste.
2. Organization of our first "Community Harvest Festival" (\$1500)  
While we have certainly enjoyed our work, we have not yet been intentional in celebrating our achievements. In addition to the aforementioned items of recognition for our students, we want to give them a moment to shine in front of their family and friends. A festival in the garden will allow community members to come together in support of our students, as well as provide the perfect opportunity to publicize our garden. We know that community outreach will be essential to effectively organizing the maintenance and expansion of the garden.
3. Galvanized stock tanks (\$1500)

For its inaugural year, we are very happy with our garden infrastructure, and we are proud of our students' diligence. However, we recognize that constructing a garden is extremely time-consuming. Moving forward, we want to focus our efforts on sustainability instruction and hands-on learning. This will require a more efficient method of garden expansion. With the support of nonprofits, the Green Team has amassed plenty of seeds and tools. What we are lacking is space. Purchasing large, durable containers will permit us to utilize our exciting stock of seeds and ideas.

#### 4. Hydroponics and Greenhouse equipment (\$4000)

A hydroponic system and a small greenhouse will allow Green Team and science classes to utilize the school garden throughout the entire year. Evergreen Middle School opened in 2012, and many of our staff are approaching the end of their first year at the school. As a relatively new school with new staff, our electives and after-school programs are still developing. The Green Team diversifies students' choice of extra-curriculars. Green Team students will benefit from meeting consistently, both in terms of strengthening the community and retaining knowledge and skills.

#### 5. Solar panels (\$2000)

To fuel the lighting system of the greenhouse, we want – of course! –to use green energy. Solar panels will provide the teaching tools for students to make connections between energy reduction, gardening, and various sustainability issues.