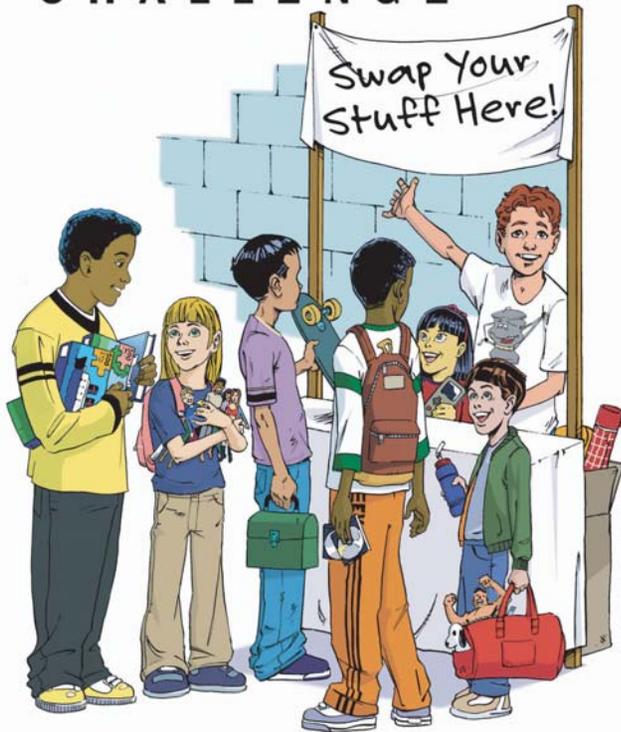


TrashMasters!™
REDUCE & REUSE
CHALLENGE



Elementary Division
Manhattan Borough
Runner-Up

PS 89
Liberty School

2013 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 Waste Prevention, Reuse and Recycling
nyc.gov/wasteless



2013 Golden Apple Awards Contest Entry Judging Info

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



ID Info: 13022
School: PS 89 Liberty School
Grade Division: LM
Borough: M

Golden Shovel Award contestant
(for borough Master School Composter)

2013 Project Entries received for:

School Population: total # 485

Core Group: **Total Participating:**

TrashMasters! Super Recyclers

Received:

TrashMasters! Reduce & Reuse Challenge

15

485

Zero Waste

Received: 5/1/2013

PS89 has extended cafeteria recycling and composting, and is now expanding recycling school-wide, successfully creating a school community atmosphere that strives to achieve as close to Zero Waste as possible. Initiatives include: expanded the cafeteria waste-sorting system; established bi-monthly Zero Waste Fridays; formed the 5th Grade Student Green Team; expanded student involvement in recycling efforts with the Cafeteria Rangers Program, and to classrooms and public areas through an Earth Day initiative; formed the Lower Manhattan Green Schools Collective, sharing knowledge and resources with other neighborhood schools; secured a new tray composting source.

TrashMasters! Team Up to Clean Up

Received:

Prior Year Entries:

11:RR-C,GS-M;13:RR-RU

Current Prizes

13:RR-ru

School Contact Information:

Phone: 212-571-5659
Address: 201 Warren St
New York 10282

Contest Coordinator: Connie Schraft, PC

Block&Lot: 1000160221
DOE Location: M089
DOE Bldg: M089

Principal: Veronica Najjar

Sustainability Coord: Connie Shraft

REQUIRED for Super Recyclers only:

Custodian: Dave DiGiacomo

Info Confirmed: 5/10/2013

Printed: 6/26/2013



April 2013

**THE GOLDEN APPLE AWARDS, NYC DEPARTMENT OF SANITATION
PROJECT TITLE: ZERO WASTE**

- School Number: PS89
- Address: 201 Warren Street , NY, NY 10282
- Phone: 212-571-5659
- Fax: 212-571-0739
- Principal: Veronica Najjar
- Email: vnajjar@ps89.org
- Contest Coordinator: Connie Schraft, Parent Coordinator
- Email: cshraft@ps89.org
- School description: PS89 is a community school in Battery Park City that uses a rich and varied social studies curriculum as a launching pad to children's education. It has an inclusion program with one class per grade combining mainstream students with some who have special needs. PS89 has suffered overcrowding issues for the last seven years or more but has managed to keep a very high educational standard.

CONTEST ENTRY INFO

- Borough: Manhattan
- Grade Division: Elementary
- Contest Entry Title: **ZERO WASTE**
- Contest Entry Summary: PS89 has extended cafeteria recycling and composting and is now expanding recycling school-wide, successfully incorporating students, staff (including cafeteria aides, School Food and custodians) to create a school community atmosphere that strives to achieve as close to Zero Waste as possible.

STUDENT INVOLVEMENT

- Student Participation: Core Group #: 15 (5th Grade Green Team)
- Student Participation: 485
- School Population: Total 485

WASTE PREVENTION & REUSE PROJECTS

IMPLEMENTATION

1. WHY THIS?

In 2010-11 PS89 was the first public school in New York City to compost the bagasse trays used to replace foam trays. In 2012-2013, PS89 intensified the waste reduction in the cafeteria and expanded efforts to address waste reduction in the rest of the school building. Building on the cafeteria recycling success, we have pursued goals of creating **zero waste** in our cafeteria, increasing student involvement and spreading our knowledge and support to a wider section of our school and community.

2. WHAT DID WE DO?

This year PS89 expanded waste reduction efforts to include five main components, which are described in detail following the Project Planning section.

- Expanded the cafeteria waste-sorting system.
- Established bi-monthly Zero Waste Fridays.
- Formed the 5th Grade Student Green Team. Expanded student involvement in recycling efforts with the Cafeteria Rangers Program, and to classrooms and public areas through an Earth Day initiative.
- Formed the Lower Manhattan Green Schools Collective.
- Secured a new tray composting source.

3. PROJECT PLANNING

PS89 has a highly active, parent-led Green and Wellness Team. Last year our principal also formed the first ever Student Green Team. Together, these two teams have expanded and improved the cafeteria waste sorting system and began to address environmental issues school wide. The parent team meets monthly (first Monday of every month) and the student Green Team has been meeting weekly since the end of the winter session, when it was formed for this academic year. The parent team is further divided into committees that meet independently and report to the rest of the team, including Tray Composting; Cafeteria Volunteers; Zero Waste Fridays; Wellness; and Lower Manhattan Green Schools Collective.

EXPANSION OF CAFETERIA RECYCLING:

In 2010 we trained the student body in the Flip/Tap/Stack procedure for composting trays as well as how to properly recycle milk and juice cartons, paper, plastic bottles, tin foil and other items included in the NYC recycling program. This academic year, we have taken it several steps further by adding bins for plastic bags, # 5 plastic containers, other plastics and more recently, two bins for “Terracycle” items including chip bags/candy wrappers and drink pouches. Through the relationship that we forged with Stuyvesant High School (another neighboring school), where they had started collecting these Terracycle items, we arranged for the high school students to pick them up regularly so they don’t end up in our landfill bin at 89. Our local Whole Foods Market accepts the plastic bags, #5 plastic and other plastic containers.

NOTE: Due to the latest announcement on the large expansion of plastic recycling in NYC to include all rigid plastic items, next year we will be able to limit our additional containers to “Terracycle” and “plastic bags”. We extend our gratitude and appreciation to the Department of Sanitation for this innovation.

In the past we formed a team of volunteer parents to supervise cafeteria waste sorting on a regular basis but this year we have expanded this in two ways. Twice per week (Tuesdays and Thursdays) Stuyvesant High School student members of their Green Team help supervise our students in the cafeteria and make sure that the right procedures are being followed. Secondly, the newly formed 5th Grade Student Green Team has started their own “Cafeteria Ranger” program and are guiding and supporting their peers by taking weekly

turns to supervise the different stations (trash; recycling; Terracycle items; and other items) during their own lunch period. We plan to expand the Cafeteria Ranger program to the other grades in the future. For this effort, we owe our deep appreciation to Cafeteria Culture who shared their “Cafeteria Ranger Program” with us as well as their visual signs.

The Stuyvesant Green team came to visit our cafeteria and they were impressed with our system and how the students knew to “throw the right thing in the right bin”. This inspired them to create their own signs and system and they now have a new and efficient recycling system in their own cafeteria. We have also added poster holders that slip into a regular trash bin’s handle and which make the signs designed by Cafeteria Culture more visible and at eye-level of the user. These poster holders were designed and built for us by the Stuyvesant students They provided the materials and design and, in exchange, we laminated the posters for their cafeteria as well as for our own at PS89. We continue to have a mutually beneficial relationship with Stuyvesant and always share resources and knowledge between the two schools.

ZERO WASTE FRIDAYS:

This is one of the most exciting developments that we have created in the 2012-13 academic year. Following on our very successful “Zero Waste Friday Challenge” for Earth Day last year, we decided to run “Zero Waste Challenges” more regularly. In November 2012, we started to run them monthly and since January 2013 we have been running them bi-monthly –every other Friday. See table for more information and results.

DATE**	LANDFIL	COMPOST
11/30/12	10 LBS	39 LBS
12/14/12	8 LBS	41 LBS
1/11/13	2 LBS	43 LBS
3/8/13	16 LBS*	42 LBS
4/5/13	5 LBS	42 LBS
4/19/13	12 LBS*	53 LBS

*Trash from breakfast was accidentally included

** We were not able to collect data on every Zero Waste Friday due to the fact that our scale disappeared for a while and some days the volunteer in charge was not able to do it.

For this initiative we collaborated with our local Whole Foods Market, which on Zero Waste Days, accepts and recycles all our compost, plastic bags, #5 plastics as well as all the other plastics not being until now recycled by New York City.

We presently average a total of between 6-8 pounds of landfill trash on Zero Waste Fridays between 4 lunch periods including around 500 PS89 students as well as almost 300 IS89 students, with whom we share the building and collaborate. Three years ago, when we started composting the trays, we dramatically lowered our trash from 9-12 bins daily to one a half to two bins per day. Now, due to our increased waste sorting, we have lowered that to one bin or less per day. On Zero Waste Days, however, we further decrease our garbage and barely create ¼ of a bin of landfill trash including all four lunch periods.



←Trash collected on Zero Waste Friday 4/5/13



Compost and other recyclables -> brought to Whole Foods

TRAY COMPOSTING:

In 2010 and 2011, we relied on a local CSE, Holton Farms, and then a commercial hauler to pick up trays for a very small fee. This year (2012-13) we established a better, more local partnership with GrowNYC through a neighbor school, PS234 as a result of our initiative to form a Lower Manhattan Green Schools Collective (LMGSC) and create a forum to share ideas and resources in the area schools. We deliver the trays to GrowNYC's compost stall at our local greenmarket on Saturdays.

Presently, the school children Flip/Tap/Stack their trays at lunch, School Food staff store them in an extra refrigerated walk-in where no food is stored, and parent Green Team members bring the trays to the GrowNYC stall at the Green Market on Greenwich Street.

RECYCLING EFFORTS OUTSIDE OF CAFETERIA:

- PS89 collects and recycles bottle caps (sent to Aveda to make other products). This will become redundant with the new NYC plastic recycling regulations that will include bottle caps.
- PS89 collects and recycles batteries.
- Wearable Collections increased in frequency from three collections a year to monthly collections. The first Monday of each month, we collect household textiles from PS89 families, as well as the school, for this company that recycles unusable textiles for industrial use (insulation) or distribution of gently used clothing to the needy. Collections range from 500lbs to more than 3500 lbs. Another local public school PS276 and the Manhattan Youth Community Center have also established regular collections through our connection at Wearable Collections.

4. STUDENT INVOLVMENT

STUDENT GREEN TEAM:

Earth Day Initiative

Our Student Green team has evolved since its formation last year. This year the students created their own Earth Day Campaign for the school including two components. First, they created an "Earth Day Class Resolution" campaign. They went to all the classrooms and led every class in coming up with their own "Earth Day Resolution" to be followed for at least one week, and ideally for the rest of the year. Some examples of these are:

- One pre-K class made a book out of classroom recycled paper.
- several classes focused on improving their own classroom recycling.
- one fourth grade class made t-shirts from old shirts advertising various recycling/sustainability slogans for the kids to wear and pass the message.
- several classes started planting in the classroom.

For the second part of their campaign, they found ways to highlight that students were still letting too much food and trash drop on the cafeteria floor. Zero Waste Fridays and the expansion of the cafeteria waste sorting system certainly reduced the food dropped on the floor; however the Student Green Team still felt that we needed to make students more aware of this and stressed the fact that the custodians have to pick up after them. On Friday April 29th, the Student Green Team ordered food for the custodians during their lunch period, served it to them. They also did a little ceremonial sweeping around some of the tables to show the work that our custodians have to do when we don't pay attention to what we drop on the floor. In addition, they drafted their own statement to their peers and announced it at the beginning of the lunch period to explain what they were doing and highlight the fact that we are still dropping too much on the floor. [see statement below] The custodians were touched and appreciative of this effort. The rest of the students were very impressed as well.

Student Green team: Sebastian Hampel, Lila Miller, Angelina Roffo, Anabella Pelaez, Garrett Chan, Ariana Viegas, Madeleine Martinez, Ailun Ding, Arjun Arya, Edward Dowd, Andrew Grinzayd, Peyton Torgan, Samantha Alcid.

The Custodians enjoying the lunch served by the students.



Student Green Team Statement:

As you all know, today is Earth Day. We are on the fifth grade Green Team. We thought of many activities to do today, and we voted to honor our custodians – Dave, Frank, Willie, Jose, and Derick. These custodians have been at PS 89 for a decade. They have done so much for us. Such as picking up our garbage, cleaning our school, and dealing with us, for over ten years. When Hurricane Sandy struck our school, the custodians stayed here day and night protecting our school. We are giving our custodians a day to relax. They will sit down and eat lunch, while we clean for them. Thank you Dave, Frank, Willie, Jose, and Derick for all your hard work.
Cafeteria Rangers Program

The 5th Student Green Team also began implementation of the Cafeteria Rangers Program that CafCu shared with us. With Cafeteria Rangers, every student has a specific role for a week, supervising either the trash, recycling bin, Terracycle bins or the other bins (#5 plastics and plastic bags), as well as compost on Zero Waste Fridays. They wear green aprons and gloves, and ensure that everything goes in the right bin. They truly enjoy this role and are passionate it. They have begun to recruit 4th graders to train them to take over for the program next year.

5. COLLABORATION.

LOWER MANHATTAN GREEN SCHOOLS COLLECTIVE:

In 2012-2013 PS89 formed the Lower Manhattan Schools Collective (PS89, IS89, PS234, PS150, PS276, Millennium High School, Stuyvesant High School and PS397) and have met approximately 5 times to share resources, information and ideas. The PS89 Green & Wellness Team felt that other schools could benefit from some of the initiatives we have instituted and we could also benefit from theirs. For example, PS234 shared their GrowNYC contact with us and we switched our tray composting from a commercial hauler to a local non-profit organization.

AFFILIATIONS:

1. **Cafeteria Culture (CafCu):** This is one of our main partners and sources of information. CafCu shared its Cafeteria Ranger program with us and gave us access to their colorful and fun alternative messaging. CafCu also provided advice and support when we started forming the LMGSC and continues to provide support as needed. They will be attending our June 2nd Wellness Fair to provide information to the general public about the Ranger program and other waste sorting ideas for school cafeterias.
2. **Whole Foods Market** facilitates our Zero Waste days by allowing us to bring extra items to their Transfer Station for recycling (including compost). They gave a presentation at our “Green” PTA meeting this April informing parents of our partnership and providing information about other events coming to their venue. They will be also attending our June 2nd Wellness Fair.
3. **GrowNYC** composts our bagasse trays at their post in the Greenwich Street Farmer’s Market on Saturdays. Also will be attending our June 2nd Wellness Fair and will have a table with composting information as well as a healthy cooking demonstration.
4. **Stuyvesant High School** students visited our cafeteria and, using our experience and knowledge, created their own cafeteria waste sorting system, as well as new signs and poster holders. High School Students complete community service hours by using some of their free periods to help our students recycle and sort waste in the cafeteria Tuesdays and Thursdays. They collect Terracycle items from us thus lowering substantially our trash production. They designed and made poster holders that fit perfectly on PS89’s trash bin handles. We share information and support.
5. **Millenium High School’s** Green Team and their advisor visited our cafeteria and are presently working to improve their own cafeteria recycling efforts. We share information with them through the LMGSC .

OTHER: Through our work we have also had affiliations and visits to our cafeteria from the our local **EPA agency, Global Green and Common Cents.**

6. PROMOTION

This year we have renewed the weekly “Green Tip” that we used to publish some years back. Through the weekly email to the parents, the “Tuesday News” we include a Green and sometimes a Wellness tip and parents have enjoyed this very much. This could be a reminder that our Local Whole Foods recycles Brita filters or an announcement about a Green event that will be taking place in the coming weeks.

We have a variety of posters throughout the school and the cafeteria and the Student Green Team is planning on writing a skit for their peers to encourage recycling in the classrooms and to introduce the news of the increased plastics recycling in NYC.

We are also hosting a Wellness Fair June 2nd 12-4.00 where GrownNYC will be doing a recycling game and other organizations such as Cafeteria Culture and Whole Foods will be providing sustainability and wellness information. At this event, as we had done with other events held at the school, we will have supervised recycling stations with clearly labeled bins and volunteers to help guide people to “throw the right thing in the right bin”.

7. EDUCATIONAL COMPONENTS

PS89 has a social studies curriculum that includes sustainability issues in some of the students’ lessons. For example, the entire first grade conducts a Spring-time Farmer’s Market study and they grow their own food in our small but productive yard garden. The science curriculum for all K-5 grades includes both sustainability and recycling sections. Further, this year the 5th Grade Green Team has taken a more proactive approach and extended lessons learned in the classroom to improve recycling school wide. Divided into groups, the Team monitors recycling in the hallways and classrooms in order to complement our extensive cafeteria recycling/composting.

PROJECT ANALYSIS

WHAT WORKED?

WASTE REDUCTION (EXPANDED CAFETERIA RECYCLING AND ZERO WASTE DAYS)

The most dramatic success of our program has been the reduction in landfill trash created in the PS89 cafeteria. Three years ago we lowered our daily trash from 9-12 bags to 1-2. With the expanded cafeteria waste sorting system, we now barely produce one bin of trash for all the four lunch periods, which is further reduced on Zero Waste Days when the bin barely reaches the ¼ mark in trash.

STUDENT GREEN TEAM and CAFETERIA RANGERS PROGRAM

Another wonderful success has been the increased enthusiasm and passion the students have demonstrated. Partly due to the increased Zero Waste Challenge days, the children's engagement has grown and deepened with the creation of the 5th Grade Student Green Team. Students listen better when their peers are talking to them, and they also naturally emulate them. The students have been noticeably galvanized by the 5th Grade Green Team and they have shown an increased interest in putting the "right thing in the right bin".

This year we have also included the IS89 student body (with whom we share the building) in our expansion of cafeteria recycling, and we have received very favorable comments from their teachers. The middle school students have responded positively and many seem proud to maximize their recycling efforts.

TRAY COMPOSTING SOURCE

The new Tray composting system is more gratifying than last year's affiliation with a commercial hauler. GrowNYC is a non-profit organization that is respected and established in the neighborhood. We are expanding our collaboration with them through participation in our up-coming Wellness Fair.

COLLABORATION WITH LMGSC

The Lower Manhattan Green Schools Collective has created a forum for us to share ideas, problems and resources, such as GrowNYC, and we have benefited tremendously from this. For example, we built on our collaboration with Cafeteria Culture, who shared news with us regarding New York's City's partnership with five other cities to form a powerful buying block, which asks suppliers to use healthier and greener options for the schools' cafeteria – for more information on this coalition see <http://articles.latimes.com/2013/jan/17/local/la-me-laUSD-food-20130117>.

One final success and a personal one for the team has been the obvious new buy-in, support and gratitude from our school staff and parents. We often get parents and staff who approach us to thank us for the green tips we provide in the Tuesday News or for the work we are conducting in the cafeteria and the rest of the school. Many people have also made significant changes in their own recycling at home due to information they have received from us and/or from their children.

WHAT DIDN'T WORK?

One area that we would like to improve on next year is the waste sorting bins we are using in the cafeteria. We created colorful signs for the Terracycle, #5's and plastic bags bins but the bins are inexpensive clear plastic containers that look grungy after a few weeks. We would like to purchase colorful bins and improve on the signage in the cafeteria to make it more appealing and thus induce better practices.

Recycling outside of the cafeteria is still a challenge – we need more effective promotion and education to reduce the waste in classrooms, hallways and other public areas.

We would like to continue to expand and deepen the collaboration with IS89 through their student green team, PTA and school staff.

APPLICABILITY TO OTHER SCHOOLS:

Most of our initiatives are applicable to most public schools in New York City as exemplified by Stuyvesant High School's visit to our cafeteria resulting in a creation of their own system. Other schools can also easily replicate the waste sorting system and the Cafeteria Ranger Program merely needs to be targeted to the right age group. Also other schools would benefit from forming a Student Green Team to inspire the rest of the school.

Our working partnership with all the staff involved in the school and cafeteria has been a key component of our success. Thus we would strongly advise other schools to make sure to consult and include all the cafeteria and custodian staff in any changes they make. The principal should be the first person to approach, and some other key staff members also have to be on board. It would be useful to come up with a well thought out plan with some options to present to the principal and to discuss with any staff involved for their comments and corrections.

MEASURING SUCCESS:

As already stated in the section "What Worked", we were able to collect trash and compost data to measure our success in the new cafeteria recycling system and on Zero Days and dramatically reduced landfill-bound garbage while increasing recycling rates.

We have also attracted increasing interest from our parent and student communities. Many students are interested in joining the Green Team and particularly in participating in the Cafeteria Ranger program. Our PTA has been asking us more often to present new developments at our PTA meetings and since last year, the April PTA meeting is centered on Green issues (due to Earth Day taking place this month) further increasing the profile of sustainability issues in our school.

One goal is to have the Student Green Team expand their monitoring of recycling outside of the cafeteria, and implement a tracking procedure so they note the amount of waste created that can be shared with the school community. Setting goals and establishing rewards or awards for improvement is one of our goals.

FUTURE PLANS:

If PS89 were to win the Golden Apple and/or the Golden Shovel Awards, PS89 will consider using any funds to:

- Replace some of our worn cafeteria recycling bins as well as the classroom recycling containers with more colorful alternatives.
- Expand the 1st Grade planting curriculum, obtaining Wolly Pockets to hang on the fence as well as planters appropriately sized in height for the smaller students to comfortably plant, and add composting. With more planting area, we could also include other grades in the composting/planting curriculum.
- Install HVAC timers to lower energy costs. According to our custodians, these can be easily installed, but we presently don't have the money in the budget to pay for the units.
- Arrange a program of presentations and films from outside sources for our students and community to increase awareness of other issues pertaining to the environment. Some films we would like to purchase are: "Bag It" and "What's On Your Plate". We would also like to gain access to more planting programs to enhance the curriculum.

We also have long-term plans to install light sensors and to find an alternative to the paper towels used in the bathrooms when the significant funding these projects require is obtained.