

The background features a large, faint, circular watermark of the United States Environmental Protection Agency (EPA) seal. The seal is light green and contains a stylized flower-like emblem in the center. The words "UNITED STATES" are visible at the top and "ENVIRONMENTAL PROTECTION AGENCY" at the bottom of the seal.

EPA Region 2 Sustainable Schools Webinar Series

Reducing Waste in Schools

Reducing Waste in Schools: Cafeteria Waste Stations

We'll take a look at what 3 innovative school cafeterias in NYC are doing to minimize waste



NYC Kids stacking polystyrene trays

PANELISTS



RACHEL CHAPUT
LIFE SCIENTIST

US EPA
Region 2

New York,
New Jersey,
Puerto Rico, &
USVI



ALISON HAZUT
PRINCIPAL

THE EARTH
SCHOOL

In East Village,
Manhattan
347 Students



MATTHEW SHEEHAN
SUSTAINABILITY
COORDINATOR



JOHANNA ESTERAS
PARAPROFESSIONAL

BROOKLYN NEW SCHOOL

In Carroll Gardens,
Brooklyn
347 Students



PAMELA SCOTT
SUSTAINABILITY
COORDINATOR

IS 52

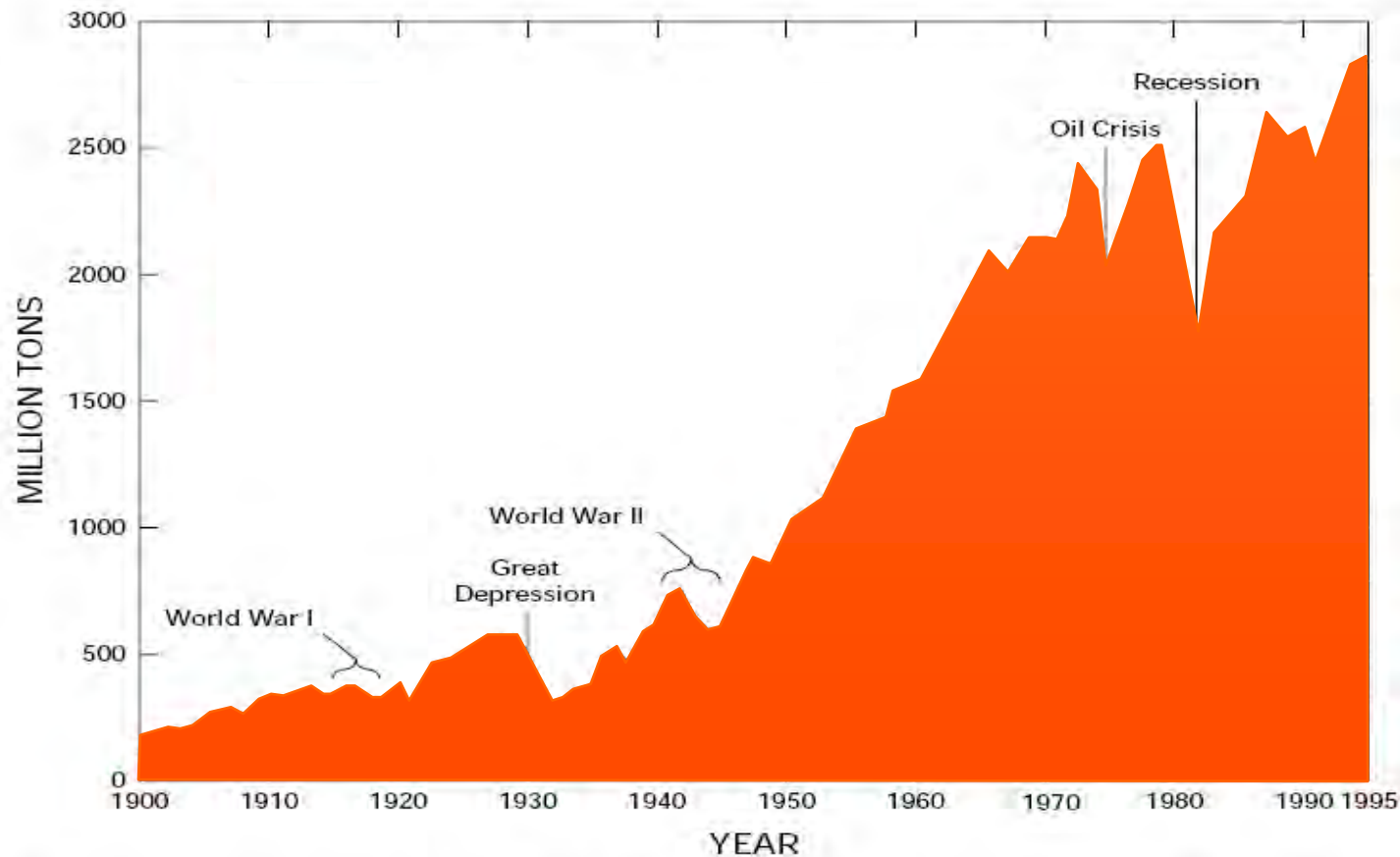
In Inwood,
Manhattan
780 Students



Sustainable Materials Management

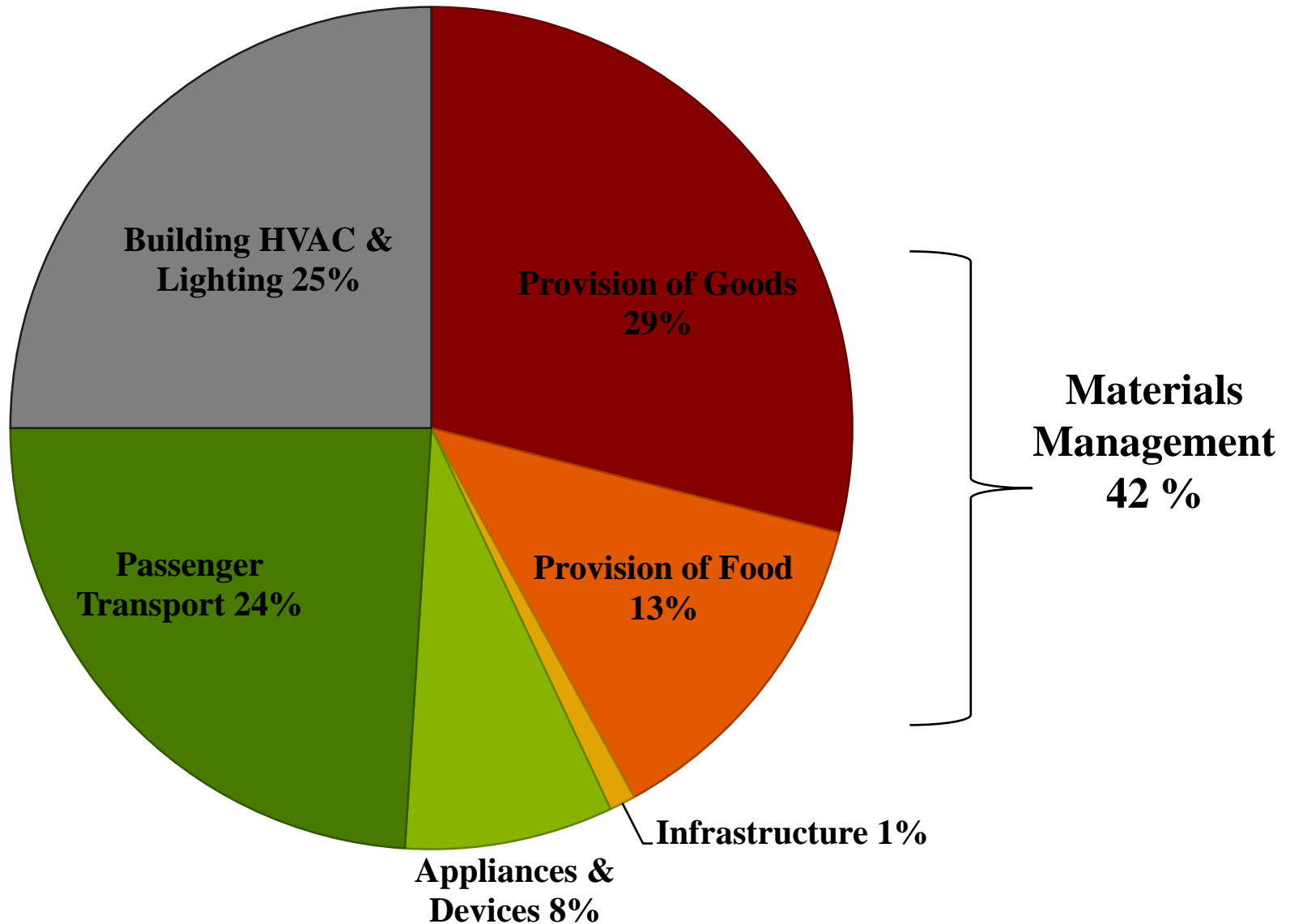
Rachel Chaput, US EPA Region 2

Materials Use in the United States



Use of materials in the United States, 1900-1995. Modified from Matos and Wagner, 1998, p. 110.

US Greenhouse Gas Emissions



**39 million
cars off the road**



**22 million
homes heated/
year**



**50
power plants
avoided**



**400 million
barrels of oil
conserved**



Impacts from Recycling Rate (33%)

www.epa.gov/wastewise

WasteWise Program | Partnerships | US EPA - Windows Internet Explorer

US EPA http://www.epa.gov/epawaste/partnerships/wastewise/index.htm

US EPA WasteWise Program | Partnerships | US EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

Wastes - Partnerships - WasteWise Program

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Conserving Resources, Preventing Waste

WasteWise is a free, voluntary EPA program through which organizations eliminate costly municipal solid waste and select industrial wastes, benefiting their bottom line and the environment. WasteWise members can join as partners, endorsers, or both. WasteWise helps its partners meet goals to reduce and recycle municipal solid waste and selected industrial wastes.

- [About WasteWise](#): Program basics and a member list.
- [Where You Live](#): Regional contacts for the WasteWise program.
- [Success Stories](#): WasteWise Awards and partner success stories.
- [Join WasteWise](#): Join as a partner or an endorser.
- [Partner Support](#): Tools for developing your waste reduction program, expert help, publications, and forms.
- [Resources](#): Key publications, topical and industry-specific resource pages, and links to related Web sites.

WasteWise Reporting: 2011

The WasteWise reporting period for 2011 data closed on April 13, 2012.

We want to thank all of our members who submitted annual data. WasteWise participants continue to reach new heights in waste prevention and recycling, broadening their programs by moving up the supply chain and taking a sustainable materials management approach to resource conservation and recovery. All should be commended for their efforts.

Check back here soon for **2012 Award Application** information.



Hot Topics

- [Join WasteWise](#)
- [Re-TRAC Fact Sheet](#)
- [2011 Award Winners](#)
- [Game Day Challenge](#)
- [Report Annual Data](#)
- [EPA's Office Carbon Footprint Tool](#)

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http://www.epa.gov/epawaste/partnerships/wastewise/index.htm

Print As-Is

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Materials Management and Sustainability

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EPA Disclaimer

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Video “How to Reduce Cafeteria Waste”

Filmed and edited by Atsuko Quirk,
a videographer and parent at the
Earth School who runs the school’s
nutrition committee.

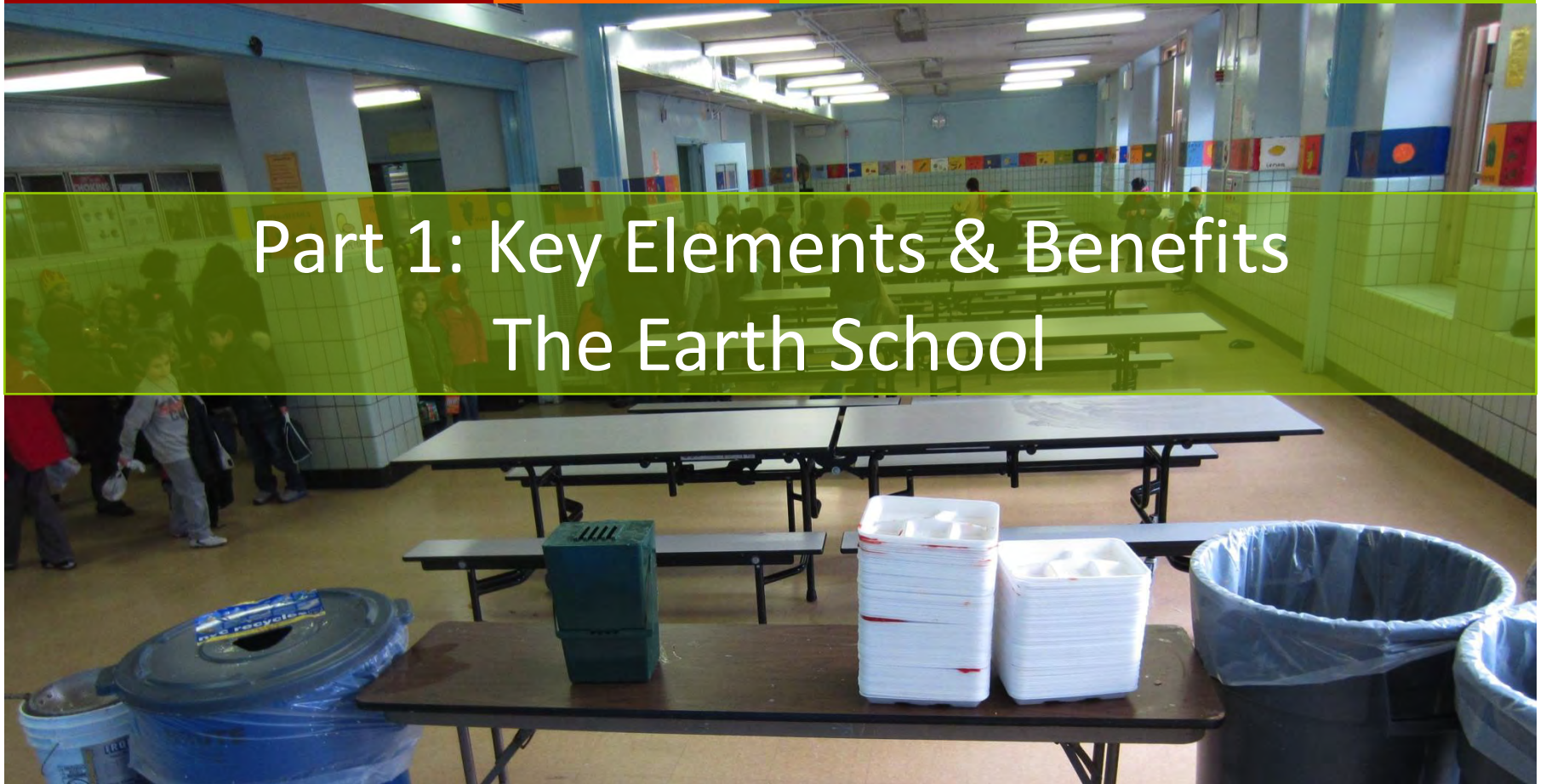
Please follow our link to:
<http://vimeo.com/41960276>



Video "How to Reduce Cafeteria Waste"

A little organization can make a big difference!

Part 1: Key Elements & Benefits The Earth School



Waste Station Set-up



A table for stacking trays,
Blue recycling bin with a cut-out lid,
A slop bucket with a strainer (placed on top of a **milk crate** for the perfect height)

2 grey garbage bins,
a green composting bucket



LESSONS LEARNED!

- We failed without having monitors at the beginning, trays were all falling!
- We started with 2 stations, which was hard to control, and created more work for custodians.
- Having one station is much easier to manage.

Video "How to Reduce Cafeteria Waste"

A little organization can make a big difference!



Part 2: Brooklyn New School

Waste Station Set-up



1 tray **stacking tower**, (hand-made!),
1 orange **slop bucket** with a colander,
(both are on a **low table** - gives a perfect height),
1 green **compost bucket**,
1 grey bin with **green cut-out lid** for paper and cardboard

3 grey **garbage bins**,
1 can for juice pouches (kid-designed!),
1 blue recycling bin with a lid,



LESSONS LEARNED!

- Students put garbage into recycling bins without the cut-out lids
- The cut-out lids with color and big letters helped students put things in the right bin.

Video "How to Reduce Cafeteria Waste"

A little organization can make a big difference!



Part 3: IS 52

IS 52

Waste Station Set-up



1 table for stacking trays,
1 slop bucket,
1 grey bin for milk cartons,

4 grey garbage bins
1 table for the slop bucket,
1 blue can for cans and bottles



Student Monitoring System

Getting students involved is a key to success!



The Earth School “Cafeteria Ranger” system

- 13 positions in each lunch period
- Each class will have 1 turn of 4 weeks in a year
- Weekly or biweekly shift
- 3rd to 5th grade classes have a management position on top of the 13, to carry the list of the monitors, distribute gloves, and check if all the supplies are there.
- The monitors need to finish eating 3 to 4 minutes earlier than other students. The teachers send kids to the cafeteria right on time to let them be the first on the service line.

LESSONS LEARNED!

We had 2 monitors from each class last school year, but it was hard to keep track of who is on duty. Letting one whole class be in charge as a team works much better. Students find their own ways to help each other, and develop a sense of responsibility.



Brooklyn New School
Lunch Monitor

- 3 students in one of the 3rd to 5th grade classes for the entire 2 lunch periods (they miss recess)
- Each class will have 1 or 2 turns of 2 weeks in a school year
- Daily shift
- 3 monitors take care of:
 - organizing stacking,
 - cutting and cleaning all the juice pouches,
 - checking contaminations of garbage and the recycling bin,
 - taking the compost out to their composting site.



IS 52

Recycling Club

- 8th grade recycling club members monitor 6th and 7th graders periodically
- The hours of monitoring at the cafeteria for the recycling club students are counted as community service hours
- Mr. Benitez (the school's Dean) observes and guides the procedure everyday with all the grades at the cafeteria



Time Management

Do students need to add extra time for stacking and recycling?

Lunch Time Schedule & number of students in the cafeteria

	The Earth School	Brooklyn New School	IS52 (no out to lunch in all grades)
Period 1	12:00 – 12:25 3 rd , 4 th and 5 th graders 140 students	11:30 – 12:00 2 nd through 5 th graders 380 students	10:25 – 11:05 6 th graders 240 students
Period 2	12:25 – 12:50 1 st and 2 nd graders 90 students	12:00 – 12:30 K and 1 st graders 120 students	11:10 – 11:55 7 th graders 240 students
Period 3	Pre-K & K classes eat lunch in the classroom		12:00 – 12:45 8 th graders 230 students

Training Students

The Earth School



- Lunch lesson in the cafeteria to go over the procedure
- Town meeting to talk about “why recycle?”
- Morning meetings in the classroom for rangers

Brooklyn New School



- Lunch training for kindergarteners in the beginning of the school year
- Monitor training for 3rd graders
- Train monitors while they are on the job

IS 52



- 8th grade recycling club members monitor 6th and 7th graders
- The school Dean goes through the procedure everyday with all the grades at the cafeteria

Training Teachers and Staff

The Earth School

- Lunch lessons, town meetings, and classroom meetings are all **teaching kids and adults at the same time**
- Recycling reminder e-mails of recycling procedure from the principal
- Staff meeting

LESSONS LEARNED

- Training adults took some work at the beginning, on top of e-mails and staff meetings, talking to them in person was helpful for some staff.

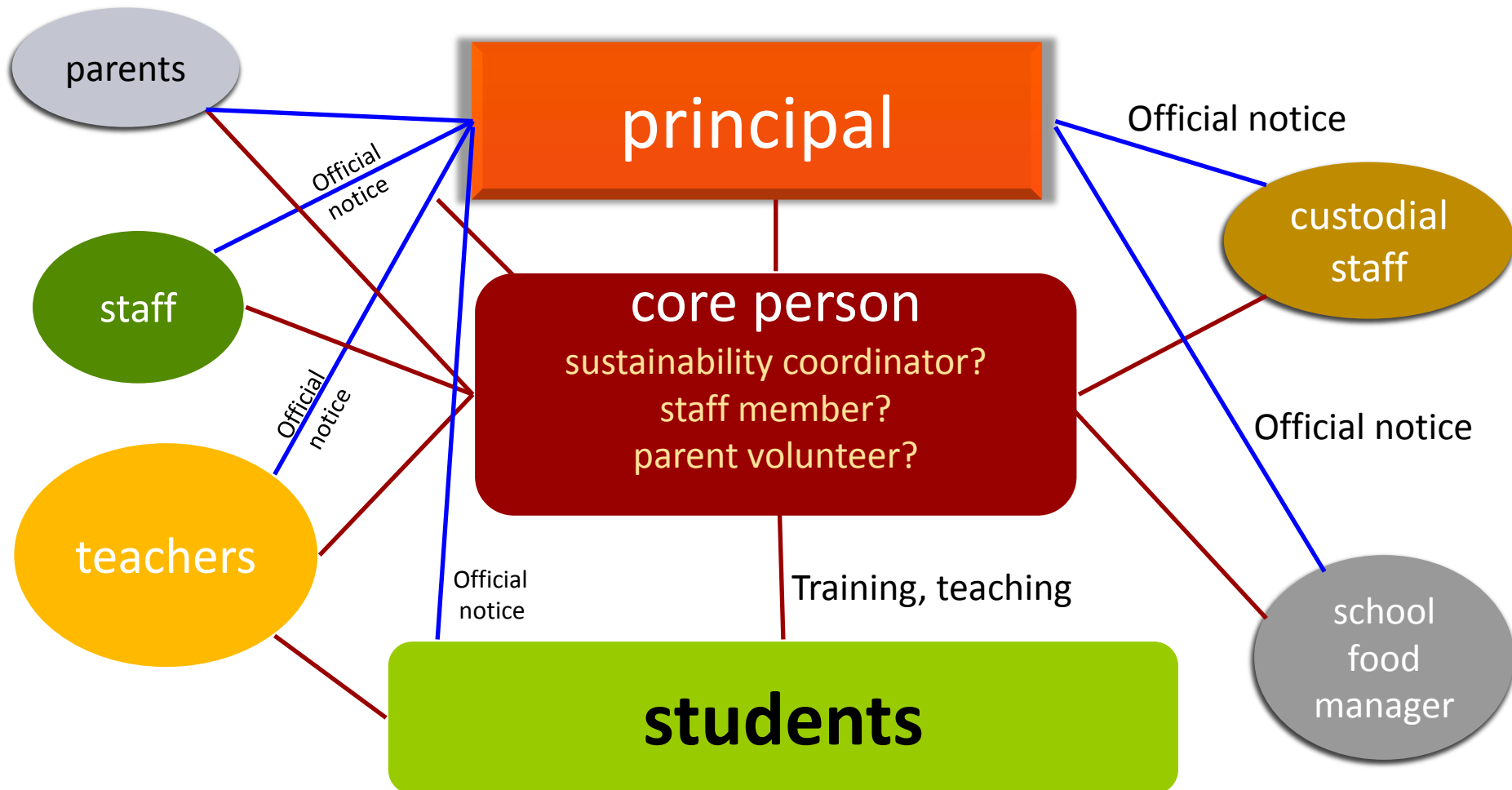
Brooklyn New School

- No specific training is done

IS 52

- Recycling has been the school's philosophy since the 80's.
- Reminder about recycling at staff meetings

Communication



What's challenging?

**BEING
CONSISTENT!**

**REINFORCE!
REINFORCE!
REINFORCE!**

**NOT
ENOUGH
TIME!**



Key Elements

Flip, Tap and Stack



Reduce the number of
garbage bags we use

Carton Recycling



Reduce the weight and the
volume of the garbage,
Save trees by recycling

Number of garbage bags

The Earth School
and 2 other schools
in the building

Total 700 students

Brooklyn New
School

500 students

IS52

780 students

Before
stacking trays
and recycling

25 to 30 bags
a day



12 bags a day



30 bags a day



After
stacking trays
and recycling

4 to 6 bags
a day

4 bags a day

6 bags a day

Benefits



Cost savings for garbage bags

➤ 39 cents a bag x 20 bags
a day, 100 bags a week
= \$39 a week! Imagine if all
1300 school buildings in NYC
can save that amount!

Saving work hours for custodial staff

➤ Less changing bags,
fewer bags to carry

Fewer plastic
bags going to
landfills


Less idling
time for
trucks

**AND
MORE**


**Students take home
the practice,
make a connection
to help the
environment!**

Steps

Observation of the current situation
(#of bags, bins, operation, etc.)



Principal approval, let him/her appoint a core person,
talk to custodians, establish a **monitoring system**,



Get supplies, make signs,
decide the **waste station set-up** layout



Announcement to teachers staff and custodians,
training students.



First day, **remind the monitors** about the job,
Announcement at the cafeteria

Related Links



**Link to the video
“How to Reduce Cafeteria Waste”**

<http://www.cafeteriawastereduction.com>



**About “Trayless Tuesdays” in
NYC public schools**

<http://schools.nyc.gov/Offices/mediarelations/NewsandSpeeches/2009-2010/trayless031610.htm>



**EPA Eco Student Blog “Trayless
Tuesdays”**

<http://blog.epa.gov/students/2012/02/trayless-tuesdays-in-nyc-schools-inspired-by-a-7-year-old/>



**How to order sugar cane (bagasse)
trays in NYC public schools**

<http://www.cafeteriaculture.org/trays-to-order.html>



**“Carton Recycling in Schools” by
The Carton Council**

http://www.recyclecartons.com/resources/schools_updated.pdf



**Recycling juice pouches
by TerraCycle**

<http://www.terracycle.net/en-US/how-terracycle-works.html>



DSNY Info For Schools

www.nyc.gov/wasteless/schools



DSNY Golden Apple Awards

www.nyc.gov/wasteless/goldenapple

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