

King County Green Schools Program

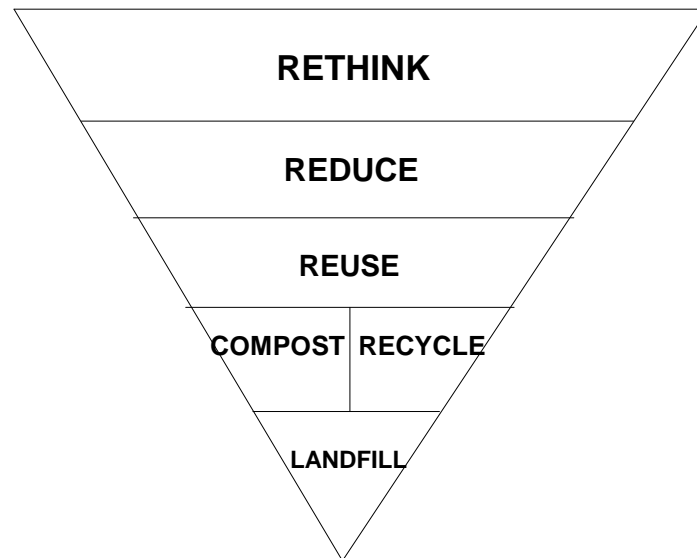
Best Practices Workshop: Recycling Session May 21, 2009

Kristine Cramer



Green Schools Goal

- Ø Build a community (including staff, custodians, students, and parents) that fully supports, understands and encourages waste reduction/recycling and conservation.




Did you know...

Of all the garbage that is thrown away, approximately what % is considered a resource (a material that has value and should not be disposed)?


- Ø a. 25%
- Ø b. 49%
- Ø c. 80%



Recycling Session Outline

- Ø What can be recycled? How do I know what can be recycled?
 - Ø Common Obstacles—and steps to success
 - Ø Green Schools Teams-how to build a team and keep them motivated, how to recover from turnover
 - Ø How to create a program that lasts
 - Ø Group discussion
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Stand up if....

- Ø Paper with crayon
 - Ø Yogurt container
 - Ø Starbucks paper cup
 - Ø Plastic fork
 - Ø Shredded paper
 - Ø Paper with staples
 - Ø Paper towels
 - Ø Granola bar wrapper
 - Ø Coated or glossy fax paper
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How do I know what can be recycled?

- Ø Check with your hauler
- Ø Ask your Green Schools Program representative



Why does it differ?

- Ø Between home and school
- Ø City contracts
- Ø Different haulers



General Rule of Thumb

- Ø Cardboard
- Ø Mixed paper
- Ø Plastic bottles (no caps)
- Ø Aluminum cans
- Ø Glass bottles



Challenge: Our indoor recycling containers are not emptied regularly.

- Ø Custodians
- Ø Students and custodians
- Ø Students



Custodial collection

- Ø Custodial collection is the first option.
- Ø Always ask, “What do you need to do your job?” “Is there anything students and staff can do to make your job easier?”
- Ø Different dolly set-ups



Custodians and Students

- Ø Students collect recyclable materials from classrooms and move them to central indoor containers
- Ø Custodian takes central container outside
- Ø Custodian empties office and lunchroom containers



Student Collection

- Ø Consider only in unusual circumstances
- Ø Can take students away from class time
- Ø When students collect, program is harder to sustain through time



Challenge: We don't recycle in the lunchroom

- ∅ The lunchroom is different from the classroom
- ∅ Set-up is critical
- ∅ Need for monitors and education
- ∅ Kick-off!



Challenge: The students will not recycle

- ✗ Create a culture of conservation
- ✗ Adult leadership
- ✗ Educate and promote your program!
- ✗ Make sure you have the materials in place



Challenge: We recycle, but aren't saving any money

- Ø Must reduce the size of the outdoor garbage dumpster or frequency of collection to save money
- Ø Must reduce and reuse as well as recycle



Challenge: We can't afford materials

- Ø King County's 80/20 match for containers and dollies
- Ø PTSA and districts for 20% match
- Ø Grants and awards
- Ø Signs are free!



Help! I can't do this alone!

Creating a Green Team

- ✗ Assign Leaders at the beginning of the year
- ✗ Use existing clubs
- ✗ Consider community service credits or other reward for participation
- ✗ Make it fun



Sustaining a Green Team- Keeping them motivated

- Ø Annual Sustainability Fair
- Ø Conservation carnival
- Ø Academic credit given for attending
Seattle's Green festival or other events
- Ø Competitions
- Ø Rewards



Praise your Team!

Tools provided by King County

- Certificates
- Banners
- Earth Heroes Award
- Web site success stories
- Press releases
- School Board meetings



How King County can support your Green Schools Team

- Ø Recommendations
- Ø Support
- Ø Supplies
- Ø Stickers
- Ø Green Team mini-grant




Educating the Community

- Ø Announce recycling information/statistics in weekly bulletins and at assemblies
- Ø Create a display of what can and can't be recycled
- Ø Make posters
- Ø Parent newsletters
- Ø School board presentations



Making your program last

- Ø Use Level 1 criteria as an assessment tool at the beginning of each school year
 - Ø Have at least two staff members to lead the effort
 - Ø On-going promotion and education
 - Ø On-going monitoring and evaluation
- 
- A decorative graphic in the bottom right corner consisting of several concentric circles, resembling ripples in water, rendered in a lighter blue color against the dark blue background.

❌ Monitor your efforts

Is there garbage in the recycling?

❌ Are outdoor
garbage and
recycling
dumpsters full?

[illegible]

King County Green Schools Program

Recycling Rate Calculation Worksheet and Reporting Form

This worksheet will help you determine your school's recycling rate. It also serves as a form for a King County Green Schools report to register your school in the Green Schools program (once per year) to ensure that the school continues to be recognized as a King County Green School.

Recycling rate is the percentage of total solid waste (garbage plus recyclable materials) that is being recycled. Use this worksheet to figure out the school's monthly recycling and garbage quantities, then use the formula (R) below to calculate the school's recycling rate.

Then

- Calculate your school's garbage and recycling quantities and its recycling rate at least twice per year to track how well the school is recycling and reducing waste.
- This exercise also will help to determine if (1) your school can decrease its outdoor garbage collection to save money; or (2) your school needs a larger recycling container or more frequent collection.
- Math teachers can involve their students in this practical application of math skills.
- Use the same unit of measurement (pounds, yards, for example) to calculate both recycling and garbage quantities.

1. Determine Recycling Quantity

A. What is the size of the outdoor recycling container(s) at your school?
Find this information in the monthly invoices (received by school districts and private schools) from the recycling hauler, or call your recycling hauler.

Container Size: _____ (in)

B. How full is the outdoor recycling container(s) when it is emptied?
Ask the hauler how full the outdoor recycling container(s) is when it is collected by the recycling hauler. Or, the day before the container(s) will be collected, check to see how full it is. Use the garbage and recycling tracking device as a helpful tool to track fullness of containers.

Container is _____ % full (e.g., 50%, 75%, 100%) (R1)

C. How often is your outdoor recycling container(s) emptied each month?
Check invoices from your recycling hauler, and also ask the school's custodian how often the outdoor recycling container(s) are emptied each week.

Container is emptied _____ times per week (C)

D. Calculate your school's monthly recycling quantity.
Multiply "A" (the size of the outdoor recycling container) by "B" (the % full it is when collected), then multiply the result of that calculation by "C" (the number of times the container is emptied each month).¹ For example, if your school has one 64 cubic yard 50% full outdoor recycling container and it is emptied 4 times each month (2 times per week multiplied by 2), then your school recycles 28 cubic yards per month. Calculation: $64 \times .50 = 32$, then $32 \times 4 = 128$ cubic yards.

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Size of Recycling Container (Part A)		Fullness of container when collected by hauler (Part B)			Times per week (Part C)		Recycling Quantity		Monthly Recycling Quantity (multiply by 4.2) ¹

¹To calculate the number of times a container is emptied each month, multiply the number of times the container is emptied per week by 4.2 (which is the number of weeks in each month).

Education

- Ø King County Green Schools Website
- Ø Free King County assembly for elementary students and workshops for both elementary and secondary students
- Ø King County Green Team Program
- Ø Take a tour of recycling or composting facility





Curriculum ideas

Ø Green Schools website

Ø Videos

Ø Activity guides

Ø Classroom workshops



BE A **G**arbage umshoe

INVESTIGATE YOUR GARBAGE

Grade level
Intermediate (3-6)

Subjects
Math, social studies

Teaching Time
Week 1: 45 min.
Week 2: 30 min.

Skills
Gathering, interpreting, and applying data, math.

Materials
Ten empty paper bags, rubber gloves, weight scale (optional), and copies of "Be a Garbage Gumshoe" investigation activity sheet (see back).

OBJECTIVES
Students will become aware of what they put into the waste stream and how they can change their habits. Students will be encouraged to improve their recycling habits by conducting a garbage and recyclables audit.

PROCEDURE

- First Week**
Students will set up two containers: one for garbage and one for recycling. (In order to make measuring the contents easy and uniform, students can place paper grocery bags in the garbage and recycling containers.) At the end of each day students will estimate the volume (bags are 1/2 full, 1/4 full, 3/4 full, etc.) and/or measure the weight (using a scale) of both recycling and garbage and record the figures on the "Be a Garbage Gumshoe" chart.
- Students will check their containers for "contamination." Record on the chart the total number of items that were incorrectly placed in the recycling, and the total number of items that were incorrectly placed in the garbage.
- At the end of the week, tally up the total volume and/or weight of recyclables and garbage, and the number of incorrectly placed items for the first week. Ask:
 - How much of each did the students generate?
 - What could be done to decrease the amount of garbage?
 - What could be done to create less waste in the first place by reducing and by reusing?
 - What can be done to decrease the amount of incorrectly placed items?
- Second Week**
Follow the identical process as described in week 1. Tally all results on the second part of the chart.
 - Ask how week 2 compared to week 1. Explain the differences.
 - Discuss again what could be done to reduce and reuse further.
- Encourage students to conduct waste audits at home. Pass out copies of the "Be a Garbage Gumshoe" chart for them to use at home!

PRE & POST DISCUSSIONS QUESTIONS

- How can you and your family change habits to reduce the amount you throw away?
- What types of products should we buy if we want to cut down on waste?

Save our resources..... and make money

- Ø Cell Phone
- Ø Printer Cartridge
- Ø Capri-Sun
- Ø Text book recycling program
- Ø Electronics
- Ø Batteries



Glacier Park Elementary

- | Improved collection
- | Education/promotion
- | Added materials, including food scraps

Results

- | Increased recycling rate from 9% to 54%
- | Reduced garbage disposal costs by \$7,000



Skyview Junior High

- Ø Added materials
- Ø Improved collection
- Ø Education/Promotion

Results

- Ø Increased recycling rate from 10% to 50%
- Ø \$1000/year estimated savings
- Ø New culture of conservation at all levels



The Overlake School

- Ø Raised nearly \$100,000 for “Go Green” effort
- Ø Created culture of conservation including curriculum integration and outreach



District participation

- Ø Issaquah School District won King County Green Globe 'Leader in Green Schools' Award
- Ø Bellevue School District made participation mandatory

What do you do?

Ø Obstacles and solutions

