

RECYCLE

NICHOLAS

REDUCE



RECYCLE

REUSE

Going Green with Recycling:

Raising Environmental Awareness in the Preschool Classroom

RECYCLE

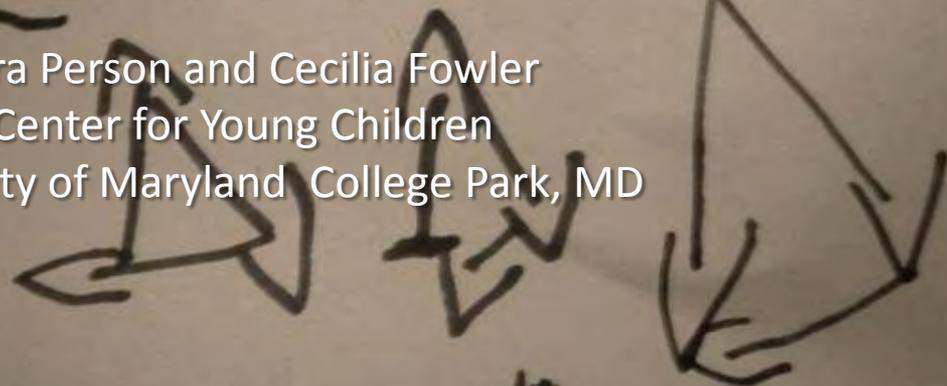
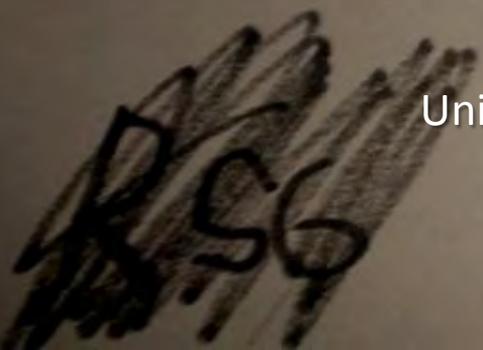
REUSE

CYC

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University of Maryland College Park, MD



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The Project Approach

- What is The Project Approach?
- The Project Approach- a set of teaching strategies that enable teachers to guide children through in-depth studies of real world topics. Each study topic is explored for several weeks, giving the children opportunities to ask questions, actively explore hands on materials, interview experts, reflect on information gained, and share new knowledge with peers.

How did we decide to study Recycling?

- Based on our recent class discussions on how to take care ourselves, our friends, and our classroom, it was a natural progression to talk about how we recycled in the classroom.
- We recycled in the classroom on a very small scale. The classroom had a small recycling bin for daily items such as milk bottles and paper towel rolls. Children were able to freely go into the recycling bin to choose items to use for art work. There was also a small bin for recycled paper near the art table.
- Based on the children's interest in learning how we recycled in the classroom, the teachers decided the children would benefit from a more in-depth investigation on recycling.

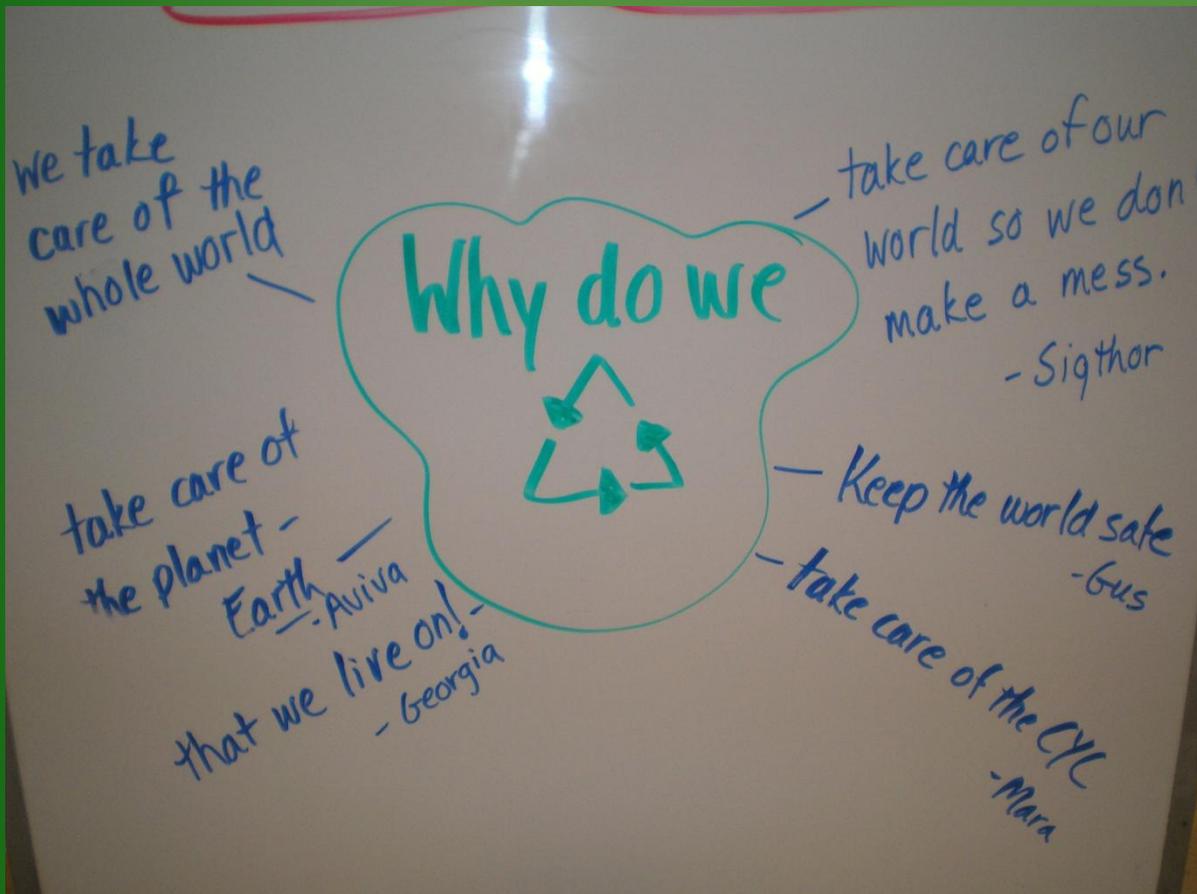
Phrase One: Gathering Prior Knowledge

What does it mean to RECYCLE?

- Put paper in the recycling can instead of the trash. - Gus, Hwa Jung
- Don't put the recycle in the trash. - Andre
- If you don't know where the trash can is, put it in the recycle box. - Georgia
- If you see someone putting recycling in the trash, remind them to put it in the recycle bin. - Caleb
- Instead of putting a milk bottle in the trash, you put it in the plastics. - Agata
- It means recycling is really important. - Seneca
- You don't put stuff in the trash, you put it in the recycle box. - Sigthor
- You can put things that aren't working in the recycle box. - Sonya
- Recycle paper goes in the recycle box. - Nicholas
- Don't put it in the trash. - Jabez
- It's recycled and you can draw on it. - Mo-ra
- You can make things out of it. - Garrick
- If it's on the floor, put it in the trash. - Hannah
- Put it in the recycle box. - Jerrold
- When you see somebody putting paper on the floor, they can put it in the recycle bin. - AVIVA
- Don't throw paper on the ground, put it on your art work. - Adeler
- We recycle things we already used. - Penny

- What does it mean to RECYCLE?
- Children were able to have an open meeting discussion on what they thought it meant to recycle.
- Most children's prior knowledge was based on the action of throwing items into the recycling bin rather than the trash can.

Why do we Recycle?



- All the children knew *WHERE* to put the recyclables, but not many understood the reason *WHY* they do it.
- This led us on a journey to find out the importance of recycling.

What does this symbol mean?

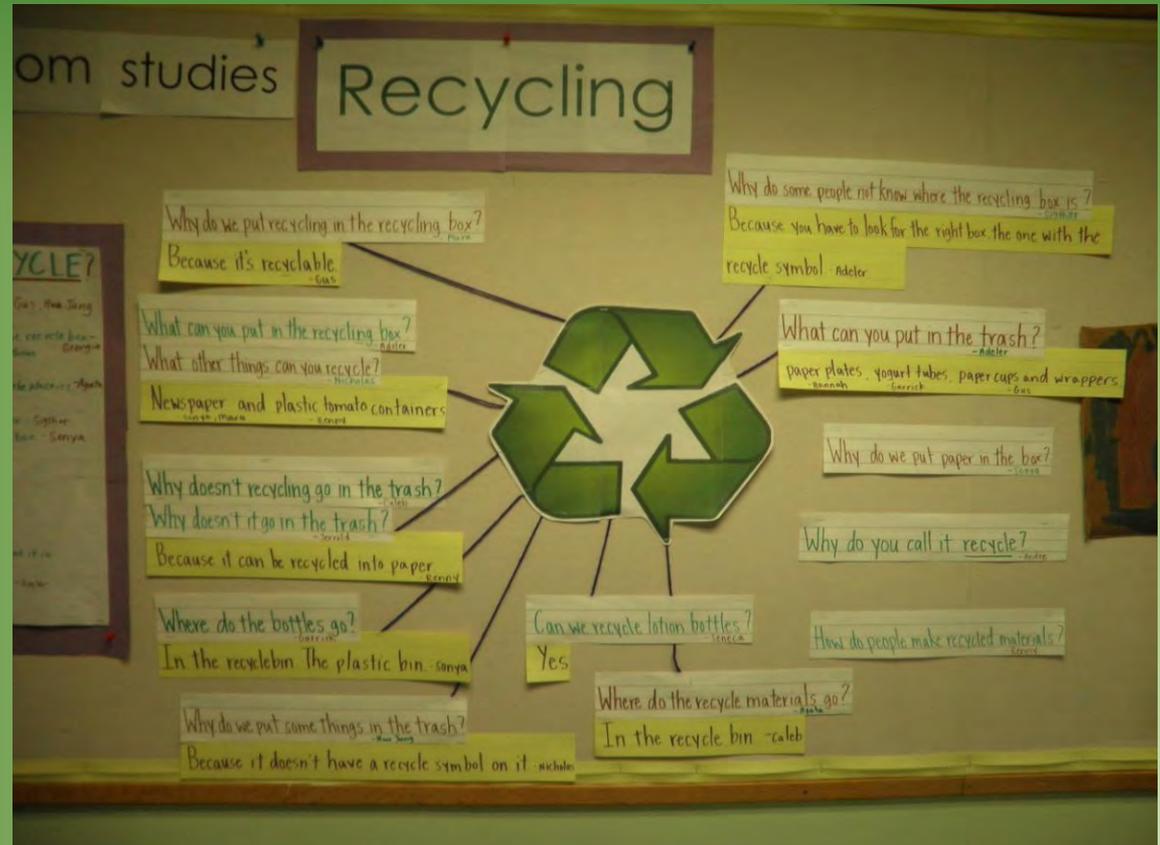
Where can we find this symbol?

The children were “searching” for the recycling symbol everywhere.



What do you want to know about RECYCLING?

- Children asked questions about the things they wanted to know.
- Throughout the study, their questions were answered and placed on the board underneath the original questions.
- Throughout the study, new questions were also added and answered to the board.



How can we sort our recyclable materials?

- The children were able to list different items that can be recycled. Through the list, the children discovered that the items could all fall under three categories: **paper**, **plastic**, and **aluminum**.
- We also looked at the different materials and decided how we can sort like items together.



Phrase Two: Investigation

How can we find the answers to our questions?

- Children had the opportunity to ask their questions to our UMD recycling expert-Mr. Guididas.
- Mr. Guididas brought in large recycling bins as well as explained to the class how the recycling truck brings all the items to the county recycling center.



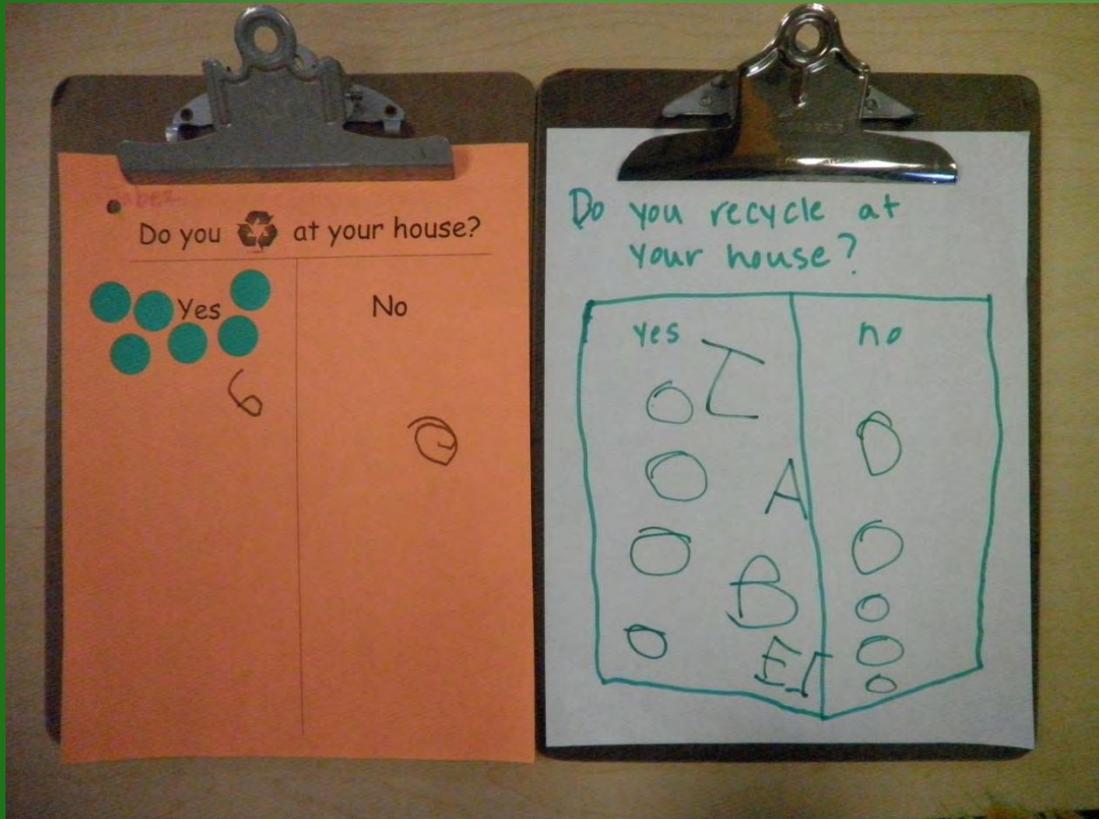
Investigating Beyond our Classroom

Children had recycling homework and were asked to find and categorize recycle items at their home into the three categories.

They were able to share and record their findings to the class.



Surveying the School



- Children worked in small groups to ask the children in each classroom if they recycled at home.
- They asked the question and recorded the answers.
- Finally, they tallied and charted their findings.

Where Does the Recycling Truck take the Recyclables?



- As our first field experience the class took a field trip to the Montgomery County Recycling Center.
- Prior to the visit the children offered their predictions about the recycling center and what happens there.



Trucks dump recyclables into a large warehouse.



A front-loader pushes the recyclables into an opening in the floor.



The children watch as the recyclables are placed into a conveyor belt.



Workers sort the recyclables based on types of material.

Our predictions about what we will see at the Montgomery County Recycling Center

	YES	NO
paper, recycled paper	● ● ● ●	
cardboard, boxes, paper rolls	● ● ● ●	● ● ● ●
newspaper		●
water bottles, containers	●	
milk bottles plastic	● ● ● ●	
aluminum cans	●	
plastic bags	●	
sweaters that got too old		●
so many recycling trucks	●	
people putting recycling in a recycling machine and making bottles	●	●
people recycling a lot of cheerio boxes and turn them into big boxes	●	●
people recycling water bottles in Recycling bins	●	

Bea Carter milk bottle

Were our predictions about the Recycling Center correct?

After our field trip, the children compared their predictions with the actual experience.

Bringing the field experience back into the classroom



By adding a few new materials into dramatic play such as a recycling bin, a crate, hard hats, and recyclables, the children were able to role play and reenact what they experienced at the recycling center.

The Three “R’s” of Recycling



Reduce- “To make less trash.”



Reuse- “To use it over and over again until it’s too old to use.”



Recycle- “To turn it into something else.”

Reduce- The ultimate goal of our study was to reduce the amount trash we produced in our class on a daily bases.

Reuse- We began reusing everyday items on a more permanent basis.

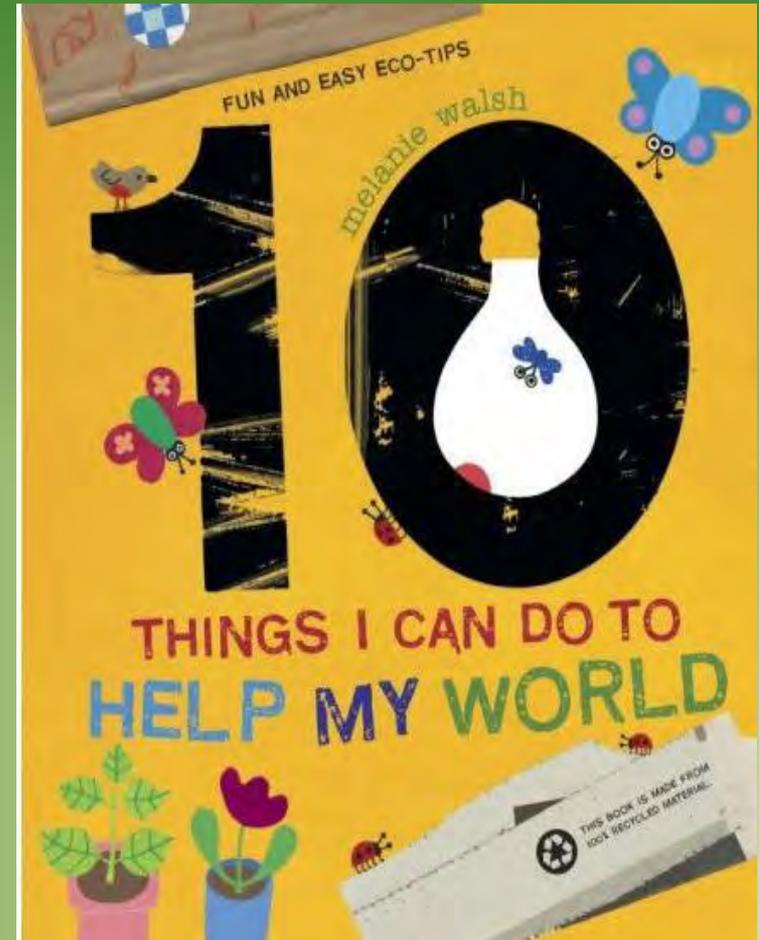
Recycle- We found out whether common products we used in our classroom were recyclable.

What does it mean to “be green”?



The class had open discussions and read books about what it means to “be green”. We talked about how it’s not only important to recycle, but to make the world a cleaner, healthier place to live.

“The Earth would be brown.” –Age 4



How is the University of Maryland “Green”?

- The class took a field trip to one of the university’s dining halls, The Diner, to find out how the campus recycles food and waste.
- The children learned about how anything that was once alive gets composted.





All food waste was placed into barrels and sent to a compost farm.

All takeout containers on campus are 100% compostable. They are made from sugar cane.



What can we do to “be green”?



Weekly
Trash-Free
Lunches



Creating T-shirt Bags



Each child brought in an old t-shirt from home to turn it into a reusable bag.



brother

STITCH WIDTH

STITCH LENGTH

XL-6562

STITCH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
STITCH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
STITCH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19





With teacher guidance, the children turned something old into something usable.

Paper Making



The children shredded used construction paper and ran it through a blender to create pulp.





They poured the pulp onto screens to remove excess water.







Composting





The children prepare the compost bin by shredding pieces of newspaper.



The worms need to be fed one pound of food a week.

Phrase Three- Culmination

- How can we tell the other children in the CYC all the things we learned about recycling?
- How can we create a book about Recycling at the CYC? Each child offered her/his thoughts about recycling at the CYC to help inform other classes.



Ongoing Recycling Efforts

- A school-wide effort to reduce, reuse, and recycle.
- Reusable cups, bowls, plates, and silverware were purchased for each classroom to reduce the amount of waste we created daily.



Ongoing Recycling Effort

Continued Trash-Free Lunches



Recycle Fridays



Composting for the next year

