

A stylized orange globe graphic is positioned on the left side of the slide. It features a thick orange outline and solid orange landmasses, with the oceans represented by white space. The globe is partially cut off by the right edge of the frame.

IPRO 332 : Our Energy Future

Designing **energy education modules** for high school students in Chicago

Carmen Aguilar-Wedge•Dariusz Bunda
Kaitlyn Conley•Alex Di Sciuolo Jones
Audrey Galo•Alfredo Garcia•Rohan Mehta
Andrew Mey•Minh Nguyen
Maile Rennard•Samantha Staley
Sarah Stone•Matthew Walczuk

FALL 2007 SEMESTER



A creative effective method of teaching
“The Ecological Footprint” was implemented,
WHAT IS THE NEXT STEP?

PROBLEM

In Society there is a **lack of awareness** about energy consumption, and very little information to show the **effects their decisions have on the world.**





OBJECTIVES

- Continue to visit Chicagoland high school students.
- Refine and present Cradle-to-Cradle module.
- Collect and analyze feedback from students and teachers.
- Develop a kit for teachers to learn to present the education modules.
- Develop a website to enhance the learning experience.
- Promote “HowManyEarths” and raise awareness concerning energy consumption.

CODE OF ETHICS

To promote awareness of resource consumption by **delivering factual information** to Chicago area students while **maintaining the integrity** of the program.

1. Well informed on copyright laws, fraud, etc...
2. Maintain contractual obligations
3. Provide actual and truthful information
4. Uphold standards of host schools
5. Present unaltered information to the community
6. Be respectful to students
7. Refrain from actions that violate personal needs



TEAM ORGANIZATION

OUTREACH

Presentation of modules

Creation of starter kit

Expand audience




TEAM ORGANIZATION

WEBSITE

Development of HowManyEarths.com
Create online resources
Publicity



HowManyEarths PRO332
OUR ENERGY
FUTURE

HOW MANY  ...there's only one.

[Home](#) [About Us](#) [Resources](#) [Teaching Tools](#) [Multimedia](#)

[Quiz](#)
[Movies](#)

Check out ecological footprint results from recent events

[Green Apple Music Festival](#)

[Earthday at the Illinois Institute of Technology](#)

Where do you fall into the mix? Find out if you are as resource conscious as you think you are.

[Download a copy of the Footprint Calculator](#)

Event Calendar

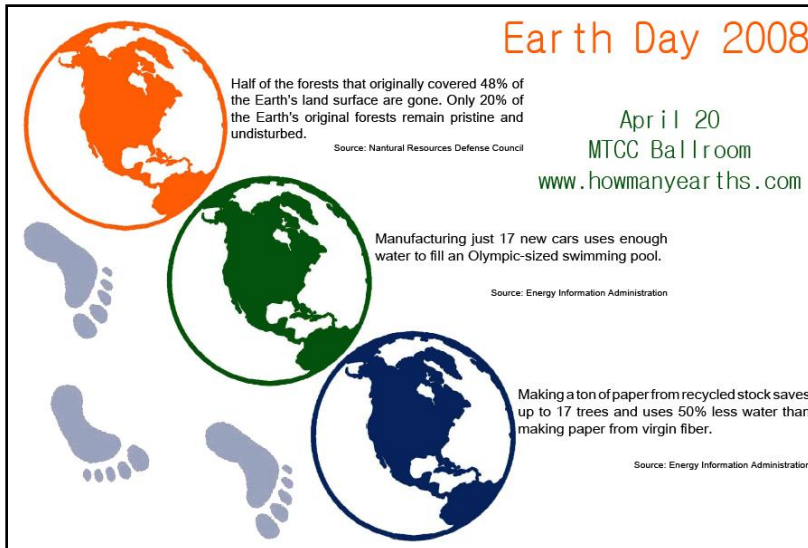
Date	Event
02.26.2008	Learning Objective Post Te
03.07.2008	Code of Ethics Dia
03.13.2008	Hyde Park Presentation
04.20.2008	Green Apple Festival

sponsors copyright 2008

TEAM ORGANIZATION

MARKETING

- Create marketing plan
- Create promotional materials
- Seek sponsorship



Earth Day 2008

April 20
MTCC Ballroom
www.howmanyearthths.com

Half of the forests that originally covered 48% of the Earth's land surface are gone. Only 20% of the Earth's original forests remain pristine and undisturbed.
Source: Natural Resources Defense Council

Manufacturing just 17 new cars uses enough water to fill an Olympic-sized swimming pool.
Source: Energy Information Administration

Making a ton of paper from recycled stock saves up to 17 trees and uses 50% less water than making paper from virgin fiber.
Source: Energy Information Administration



HowManyEarths PRO332
OUR ENERGY
FUTURE2

ENGINEER'S WEEK – February 23, 2008



HowManyEarths
IPRO3332
OUR ENERGY
FUTURE

A new opportunity for reaching a broader audience

HYDE PARK VISIT –March 13-14



**A great first high school visit but,
How Can We Can Make a Bigger Impact?**





OUR RESULTS

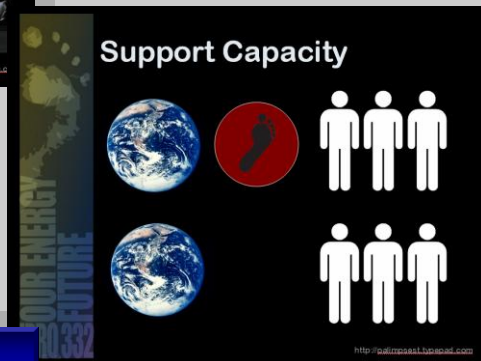
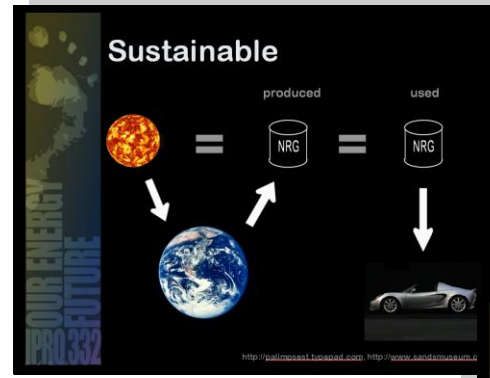
ECOLOGICAL FOOTPRINT MODULE

Day 1



	Production	Use	Disposal
Steak			
Car			
Heat a House			
iPod			

Day 2



ENERGY JEOPARDY

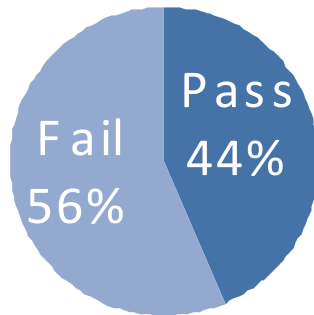
The 4 Categories	Energy	EF Terminology
100	100	100
200	200	200
300	300	300
400	400	400
500	500	500



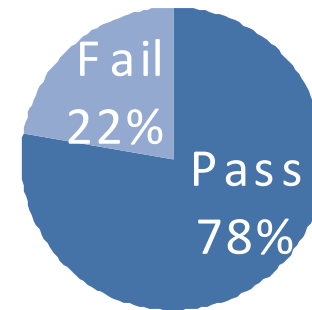
STUDENT RESULTS

Ecological Footprint Module

Pre-test



Post-test

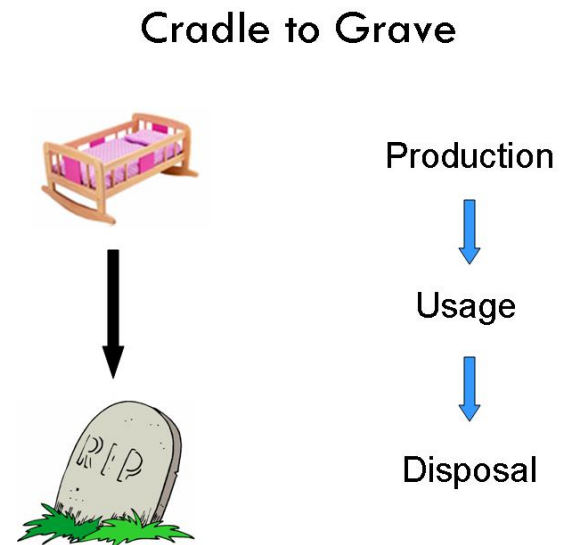
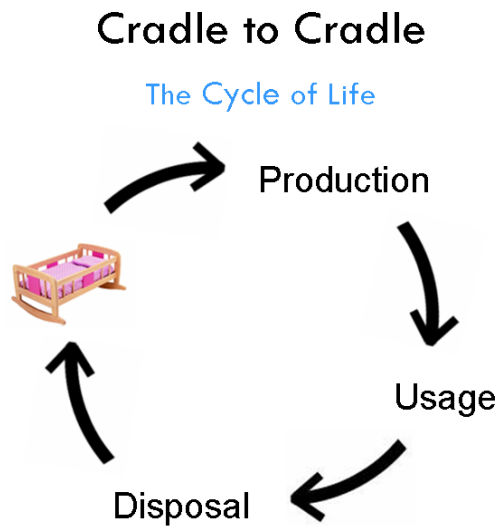


Data based on:
2 schools
5 classes
100 students

CRADLE-TO-CRADLE MODULE

Created as a branch of the Ecological Footprint Module to further enhance energy consumption awareness.

This module purveys the idea of sustainability to students by showing them the difference between renewable and nonrenewable resources.





ECOLOGICAL FOOTPRINT TEACHING KIT

Script

Ecological Footprint Calculator

Pre-test/Post-test Worksheets

Student Feedback Survey

Follow Up Check-List

Additional Classroom and Outside Activities

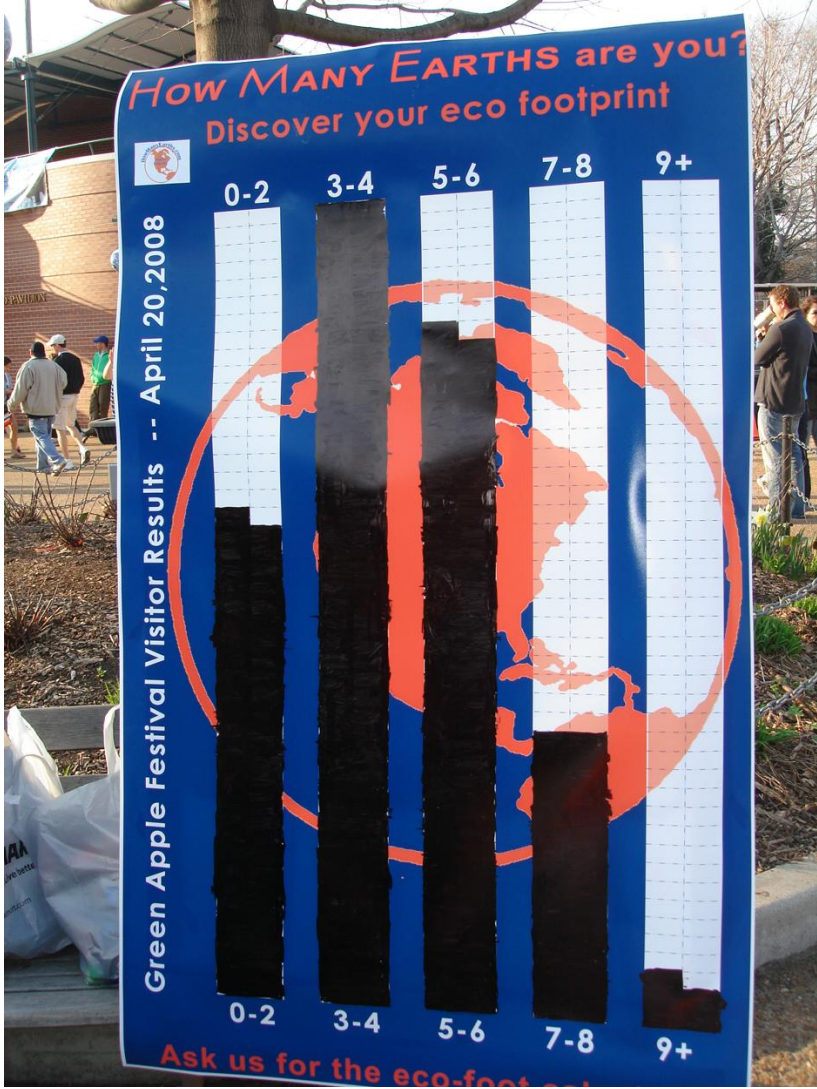
CD with digital documents

EARTH DAY AT THE ZOO- April 20, 2008



Great attendance, interested and eager audience, good exposure

CALCULATOR RESULTS



Earth day at the Zoo results charted during the event

IIT GREEN FAIR – April 22, 2008



On-campus publicity, book drive kick-off, college oriented audience

TEEN MEDIA FAIR – April 26, 2008



Curious teens, contact with youth organizations, youth media oriented audience



WEBSITE

HowManyEarths
OUR ENERGY
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Modules 1 & 2

HowManyEarths.com

Kill cow Clean cow

Feed cow Transport meat

Grow crops Freeze meat

Cut steak

Cook steak

Waste decomposes Eat steak

Digest steak

HOW MUCH ENERGY IS NEEDED TO PRODUCE A STEAK?
WHAT PROCESSES ARE INVOLVED?

Practice Quiz

What kind of car uses gas and electricity to propel them?

Enter your answer here:

Check Answer Fill in the blank Text Field.

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Our Energy Future

HOW MANY

...there's only one.

- Home
- About Us
- Resources
- Teaching Tools
- Multimedia
- Quiz
- Movies

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EXPENDITURES

	<u>BUDGET</u>	<u>FUNDS DISPERSED</u>
Website	\$120.00	\$55.00
Stickers	\$40.00	\$135.00
Posters	\$50.00	\$75.00
Supplemental Material	\$100.00	\$90.00
Shirts	\$250.00	\$200.00
Transportation	\$250.00	\$200.00
Refreshments	\$50.00	\$92.00
Green apple	\$0.00	\$250.00
Bags	\$150.00	\$0.00
Kit	\$200.00	\$0.00
Carlson Environmental	\$0.00	-\$150.00
Total	\$1,210.00	\$947
	<u>HOURS SCHEDULED</u>	<u>HOURS WORKED</u>
	1250	1150

ADJUSTMENTS

“We had planned goals but we made choices that allowed us to be opportunistic, creative, and flexible”

-Dariusz, Team Leader

VISIT 12 CHICAGOLAND HIGH SCHOOLS

SHIFTED FOCUS TO PUBLIC EVENTS AND A MORE DIVERSE AUDIENCE

MARKET “HOW MANY EARTHS” BY SELLING PROMOTIONAL MATERIALS

ACQUIRED A CORPORATE SPONSOR





COMPLETED OBJECTIVES

- ✓ **Starter Kit**
- ✓ **Website**
- ✓ **Marketing**
- ✓ **H.S. Visitations**
- ✓ **Implemented 2nd module**
- ✓ **Collected Feedback & Analyzed Results**

STRETCH OBJECTIVES

- + **Increased Public Impact**
- + **Created a Mailing List**
- + **Held a Book Drive**
- + **Received Sponsorship**

TOTAL IMPACT



100 students presented to

4 Major Public Events

41,000 attendees

620 Eco-foot Calculator participants

883 page requests on HowManyEarths.com

FUTURE PLANS

Mass distribution of kit

Reaching out to different organizations

Teaching Cradle to Cradle

Environmental media outlet on website

ACKNOWLEDGMENTS

Special Thanks to:

Bob Chrupka

Paul Teruel

Betty Holcomb

Fabio Buffa

Ms. Flaherty

Prof. Braband

Rachel Lowen

The students of all the classes, without whom none of this would have been possible.

The public who showed great interest and supported our organization's mission.





HowManyEarths PRO³³²
OUR ENERGY
FUTURE

Thank you for your attention.