### IPRO 332 Our Energy Future

#### **Designing Energy Education Modules**

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Information about energy needs, concerns and sources is not adapted to nonscientific communities.

# HISTORY OF THE SOLUTION



#### SPRING 2007

•Topic: Energy consumption

•Audience: CPS high school students

•Tools: PowerPoint presentation, discussion, feedback form

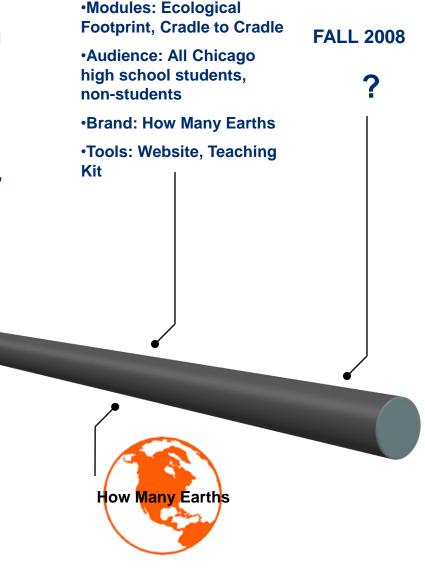
#### **FALL 2007**

•Modules: Ecological Footprint, Your Energy Choices

•Audience: All Chicago high school students

•Tools: Energy game, video, feedback form

#### **SPRING 2008**



First classroom visit

The FOOTprint





#### **MISSION:**

To promote awareness of resource consumption by delivering balanced information to Chicago-area students and residents



# ORGANIZATION CHART



### EDUCATION

Continue to visit Chicago-area high school students

- Begin to visit Chicago-area junior high school students
- Develop an outline for a third education module

Implement student and teacher feedback worksheet

**Develop Teaching Kit** for Ecological Footprint and Cradleto-Cradle modules

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#### MARKETING

Develop and distribute press kit

- Secure \$1000 in funding and sponsorships
- Apply for a grant
- Attend three public events

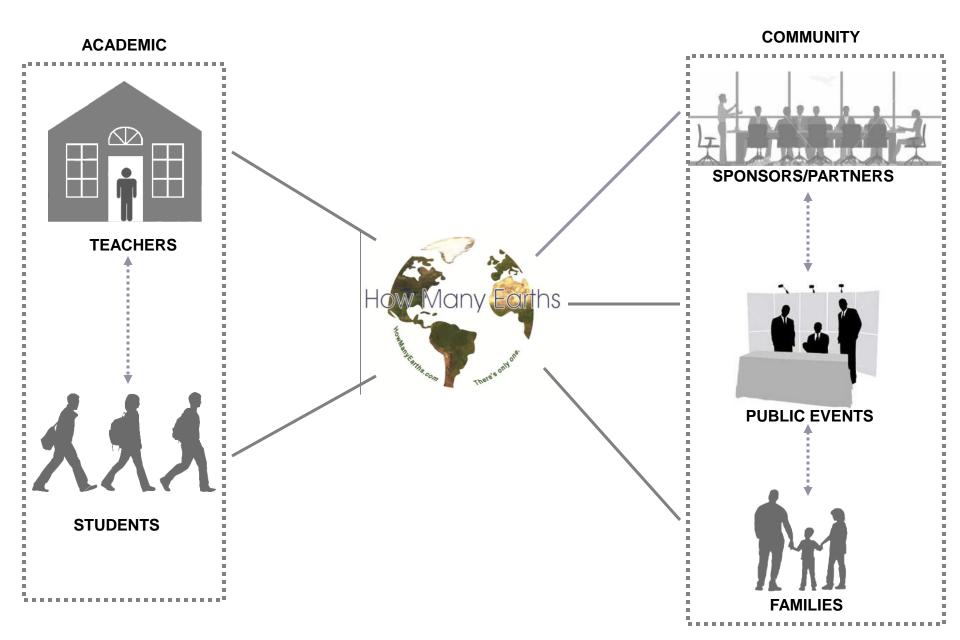
Improve HowManyEarths.com website

WEB/MEDIA

Create two short energy consumption awareness films

AUDIENCE NETWORK





# TIMELINE: WORK PHASES & MILESTONES



	EDUCATION	WEB/MEDIA	MARKETING
PHASE ONE	<ul> <li>Ecological Footprint module &amp; Teaching Kit</li> <li>In class presentations</li> </ul>	<ul> <li>Recreate website</li> <li>Research film material</li> </ul>	<ul> <li>Press kit</li> <li>Identify grant opportunities</li> <li>Identify event opportunities</li> </ul>
PHASE TWO	<ul> <li>Cradle-to-Cradle module &amp; Teaching Kit</li> <li>In-class presentations</li> </ul>	<ul> <li>Test website</li> <li>Create film one</li> </ul>	<ul> <li>Writing grant proposal</li> <li>Participate in events</li> </ul>
PHASE THREE	<ul> <li>Analyze feedback</li> <li>Identify third module topic</li> </ul>	<ul> <li>Update website</li> <li>Create film two</li> </ul>	<ul> <li>Book Drive</li> <li>Fundraising</li> </ul>

# RESULTS



#### **ECOLOGICAL FOOTPRINT MODULE**

### The Ecological Footprint

#### Seeing Where We Walk



#### **CRADLE-TO-CRADLE MODULE**

### **YOUR ENERGY CHOICES**

#### Unsustainable





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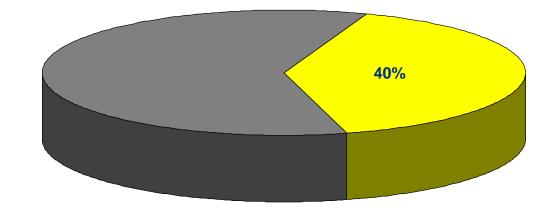


OIL



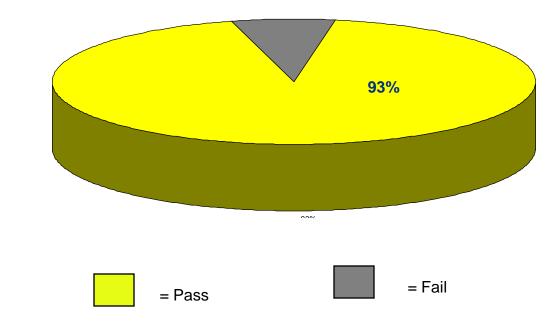






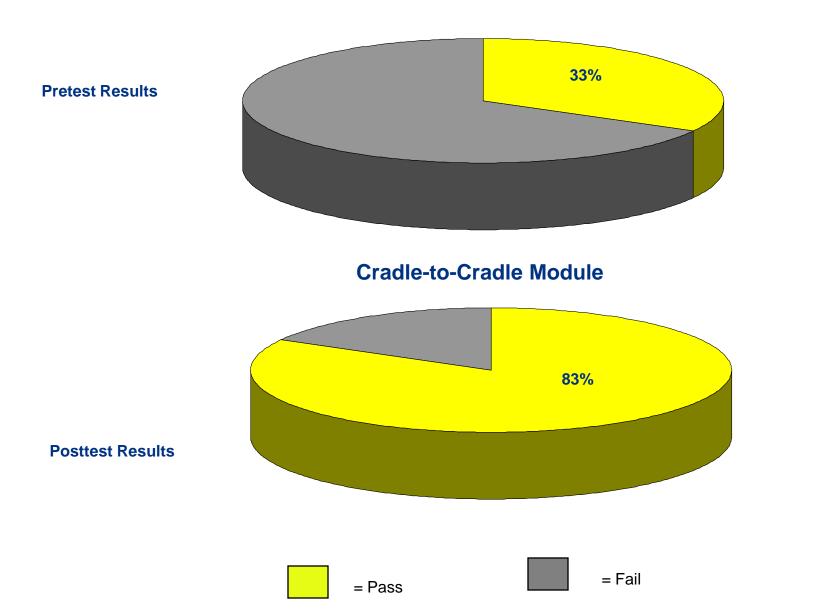
**Pretest Results** 

#### **Ecological Footprint Module**



**Posttest Results** 











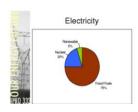
Slide 5

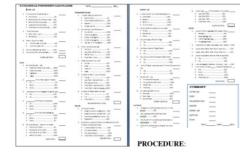




\*\*While presenting this slide remind the scholars that these are the same energy resources that was discussed earlier. Slide 3 and Slide 4 are just reminders.







Filling out the Ecological Footprint should take n levels of students)

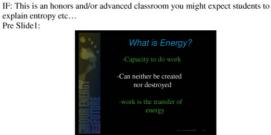
The emphasis here should be on the end r helped with the calculations of the subtota classroom environment is very important! Ask Students: What is energy? Possible Answers: The ability to do work; potential energy (stored), kinetic (movement) energy etc ...

Pre Step 1: Discuss with students what energy is in a basic format.

Students Expectations and Materials HAVE AND KNOW HOW TO USE BAS

Pre Slide1: Once the students are done, the Ecological Footp module.

Step3: PHASE 1 (\* Remember the material can be stretched ou students-Student Centered material is most im



Reduce, Reuse, ar

Cradle-to-

Cradle

**Kit** 

Teaching

inois Institute of Technology RO 332 Our Energy Future ıll 2008



**Kit** 

Pre Slide2 :



This slide contains a picture of the sun. Explain: That all energy comes from the sun. After that, it is a quick transition to the next slide

Pre Slide3:

### **RESULTS: WEB/MEDIA**





#### www.HowManyEarths.com





Film One: Ten Easy Steps to Save Energy Film Two: Environmental News

### **RESULTS: MARKETING**



**Books** needed! Our book drive will

iteracy proaram

HowManyEarths.com

Room to Read Contact us:



Harvest Festival at North Park Village Nature Center, Oct. 2008, family-oriented outdoor event



Inspiring our energy future, one student at a time...

#### Harvest Festival promotional poster



Sustainability Vision for IIT Fair, Nov. 2008, student and sponsors event

### **RESULTS: MARKETING**





IIT Raffle, MTCC, Nov. 25, 2008



Book Drive, IIT Campus, Nov 10-Dec 14

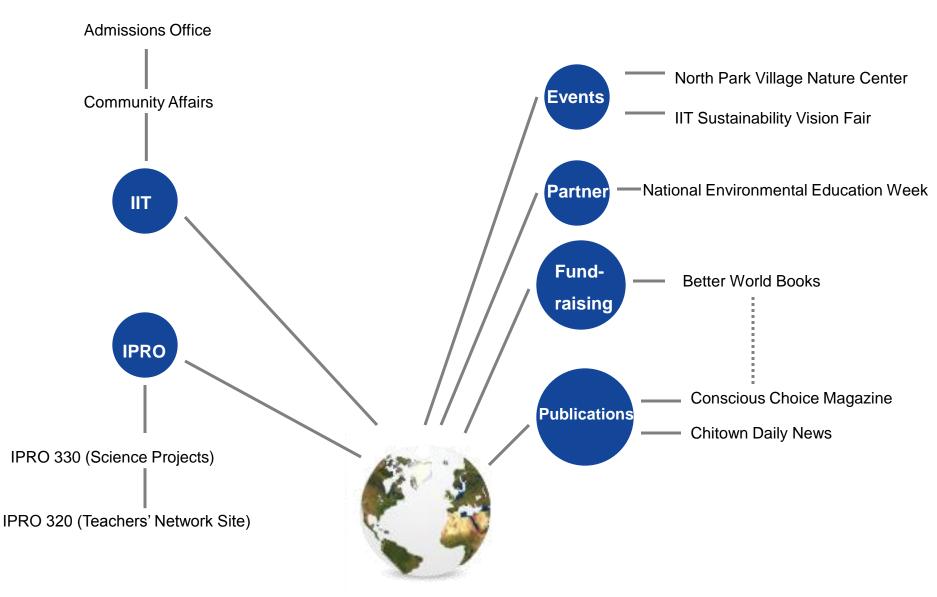


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#### Individual Donations Campaign, Nov 18-Nov 30

# **RESULTS: MARKETING**





#### The How Many Earths Network

# EXPENDITURES



# **IPRO Sponsorship**

Marketing Team	\$385.00
Education Team	\$240.00
Web/Media Team	<u>\$150.00</u>
Total	\$775.00

# **Final Expenditures**

Marketing Team \$550.00		
Education Team\$200.00		
Web/Media Team	<u>\$140.00</u>	
Total	\$890.00	

# Fundraising

Raffle	\$100.00
Book Drive	\$200.00
Individual Sponsorships	<u>\$332.00</u>
Total	\$632.00

IPRO Sponsorship Fundraising	+ \$775.00 + \$632.00
Final Expenditures	- <u>\$890.00</u>
Total Net	\$517.00

# CONCLUSION

# COMPLETED OBJECTIVES



- Completed the Ecological Footprint and Cradle-to-Cradle module
- Collected feedback from students and teachers
- Finalized a Teaching Kit for the Ecological Footprint and Cradle-to-Cradle modules
- Created a press kit
- Published a story in Chitown Daily News
- Participated in two public events
- Secured \$632 in sponsorship and funding
- Established partnership with National Environmental Education Week
- Improved interactivity of HowManyEarths.com website
- Created two short films



## • Relating to a student demographic

- Easily adaptable materials
- Real-world applications



- InterIPRO collaboration
  - IPRO 330 Teachers' Network Site
  - IPRO 320 Science Fair Projects
- Get a Bag/Give a Bag IIT Admissions Program
- IIT Community Affairs
- Style sheet



- Widen our audience by producing new interactive teaching materials
  - Classroom demonstrations
  - Games
  - Worksheets
- Become a self-sustaining organization
  - Gain sponsorships
- Continuously enhance our website
- Follow-ups with teachers and students
- Measure long-term impact

IMPACT







#### **Special Thanks to:**

DeVry University Advantage Academy A.N. Pritzker Magnet School DoLittle East Elemetary School Pershing West Middle School Prep **DeLasalle High School** Kenwood Academy College Prep **Dunbar Vocational Career Academy ChiTown Daily News Conscious Choice Magazine** Prof. James Braband

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. **Designing Energy Education Modules** 



# Questions?

