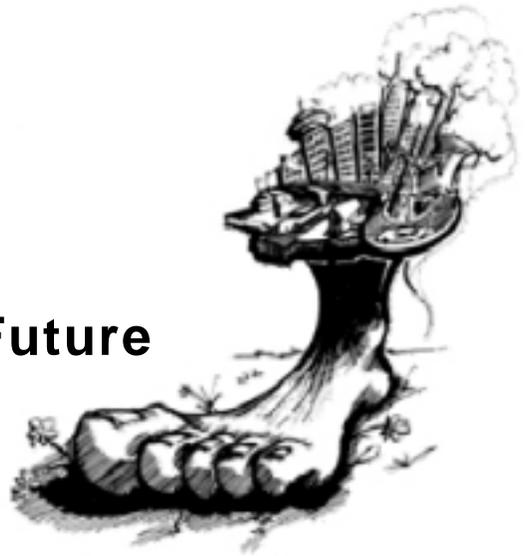


Project Plan

IPRO 332 : Our Energy Future

Advisor : Professor Jim Braband
Illinois Institute of Technology
September 19, 2008



1.0 Abstract

Very little unbiased information is available to the general public about energy needs, concerns, and sources. The philosophy behind IPRO 332 is that people should be sufficiently educated about their own energy choices to be able think critically about the corresponding consequences.

This IPRO team will build on the work underway since Spring 2007 in developing effective methods for educating high school students about energy and sustainability, expanding our outreach to junior high school students.

In addition, the team will: (1) Construct a Teaching Kit to extend the reach of the program beyond the Chicago metropolitan area to provide educators with the materials they will need to present the modules on their own and tailor it to their classrooms; (2) Complete the full-scale launch of the organization's website, www.howmanyearths.com, to enrich the learning experience, provide a professional contact interface and build a community of engaged teachers and students; (3) Execute a formal marketing plan to build awareness of our efforts, establish our brand image, promote our work, and greatly increase visibility; and (4) Pursue grants and funding with the goal of establishing a viable, long-term, not-for-profit organization.

2.0 Background

Energy can neither be created nor destroyed. This is one of two things one can know for certain about energy. The other is that energy has become increasingly scarce.

It is no surprise, then, that in the recent past, "sustainable" and "energy conscious" became buzzwords in every media outlet around the world, signifying a shift to mass interest in anything environmentally friendly. These words are often tied to appliances, automobiles, houses, and services to advocate energy saving in the noble act of conserving our planet. The IPRO 332 Fall 2008 project believes in the mission of educating young adults in becoming more energy consumption conscious.

IPRO 332 is in its fourth semester and continues to evolve and lay the foundation for becoming an established self-sufficient organization. This semester's team will work in moving forward to achieve this goal. For the past three semester's each team has worked to achieve their mission of creating an energy future through education. Starting with extensive research, preparation of materials, and proper promotion and publicity, all three previous teams created a well-rounded program that is now ready to be refined, expanded and widely promoted.

The project will utilize existing material available via the World Wide Web and organize the information in an easy-to-understand and concise way. The bulk of the presentation will include improved PowerPoint presentations to introduce students to the ideas of recycling, reusing, energy consumption, and, most importantly, to the idea of the Ecological Footprint. The presentations will become more interactive, allowing the students to take part in surveys, quizzes, and games.

Because this is a continuing IPRO, this semester's team will evaluate the pros and cons of the previous semesters' methodologies via returning team members and the analysis of previous semesters' project outcome. The team will also integrate new ideas that members of the team may have, allowing the project room for improvement.

Ethics remains one of the most important issues during the development of the project, and all presentations and media will be handled in an unbiased and informative way. The team plans to build on previous semesters' methods of collecting feedback while remaining unbiased as new materials and methodologies are added to the project.

Finally, the team wants to maintain a strong sustainability-oriented look by improving the existing official website, marketing values and goals, and educational tools such as the PowerPoint presentations and Teaching Kit.

3.0 Objectives

- (1) Present the Ecological Footprint module to ten high school classrooms, including revisiting classrooms from previous semesters, and visit five junior high school classrooms.
- (2) Enhance and finish the Cradle-to-Cradle module and present it to five classrooms to get audience feedback, and establish an outline for a third educational module to be developed in future semesters.
- (3) Collect and evaluate response from students and teachers concerning both of the modules, presentation style and the teaching kit materials, especially by implementing the feedback worksheet, and use this information to continually improve presentations.
- (4) Finalize and market a Teaching Kit containing materials for presenting the Ecological Footprint and Cradle-to-Cradle modules, including curriculum plans and instructional worksheets, and use the Teaching kit as a means of spreading our module beyond our initial audience of high school students to younger students and more community- and volunteer-based groups.
- (5) Promote the “How Many Earths” brand and education on resource consumption by developing and distributing a press kit, publishing stories in local media outlets and participating in three public events in the Chicago metropolitan area.
- (6) Establish a partnership with a national organization sharing a similar mission, acquire a grant for the upcoming year, and secure \$1000 in sponsorship and funding
- (7) Improve interactivity of HowManyEarths.com website by including new links, a frequently updated calendar, a feedback forum and new graphics.
- (8) Create new “kid’s corner” website feature with fun facts and games.
- (9) Create two new short films, showing the impact of energy consumption choices on a local daily level and on a long-term global scale.

4.0 Methodology

A. Problem

With a growing need to raise awareness with respect to rising energy demands, the challenge to harvest such awareness among young adults has been placed before us. A foundation for solving such a problem has been established for this IPRO by previous teams with the establishment of a Web site and two class-period presentations for students concerning the topics of the Ecological Footprint and Cradle to Cradle, which was presented to several high schools in the Chicago metropolitan area. It is now the challenge of the current IPRO to investigate and implement tactics for generating awareness on a much greater scale. In order to achieve such a goal, questions need to be addressed and answered, such as, (1) how can this information be conveyed in ways other than by physical presentation; and (2) how can this information be tailored to each individual’s intellect and interest level?

B. Problem Solution

IPRO 332 will address the problem of expanding the organization in a few key ways. The team will focus on addressing the first question by using the website that will serve as a tool for advertising to the general public, focusing on students and adults who are interested in furthering their knowledge of the issue of energy. Steps also need to be taken to market the cause to the general public by publishing stories in local media outlets and participating in public events. To address the second question, the team needs to build and expand upon the Teaching Kit and modules created by previous teams. This will enable us to venture outside the high-school level to ultimately reach more students. The team will divide into subteams (Education, Marketing, and Web/Media) in order to more resourcefully answer both of the questions addressed. Each subteam will need to work separately and together throughout the course in order to achieve the final goal. Although this is an involved process, it is quite reasonable and achievable as long as we work together as a team and adhere to our stated values.

C. Testing

Analyzing the reactions and suggestions of our audience is essential to the perpetual improvement of the product and services we aim to provide. With the expansion of our project came the expansion of our audience as well. Along with reaching out to high school students and staff, we will be expanding our cause to junior high schools and the general public as well as attending public events and expanding our website. The three corresponding subteams will deliver our outreach to these audiences. The Education Team will be able to gather the responses and feedback of students and teachers in a classroom setting, the Marketing Team will interact with outside organizations and the general public, and the Web/Media Team will correspond with the general public through web-interaction techniques. By subdividing our objectives we will be able to efficiently bring together a wide variety of opinions to contribute to the improvement of our cause as a whole.

D. Documentation of test and research results

The three subteams will accomplish the process of documenting and testing our products and services separately because each subteam will be able to interact well with different audiences. The Education Team will continue using previous techniques, including a pretest, posttest, and the Ecological Footprint Calculator. The process will be built upon by creating a feedback worksheet for each student to complete which will examine the individual's energy use in his or her home and how much it has improved after the our presentations' completion. We will document the results of the presentation, as well as accumulate feedback from teachers on teaching techniques. This data will be archived according to school and date. After studying the feedback and the tests, the Education Team will have a summary of the good and bad aspects of the presentation and kit. The Marketing Team is responsible for accumulating feedback from the general public, mainly by attending public events. We plan to attend three public events, each of which will have a mailing list and comment sheet to be filled out. The main objective of the Marketing Team is to promote our cause as a whole, so the main way of measuring and documenting our results is through the response obtained from different organizations and our public audience. The Web/Media Team has a similar approach to the Marketing Team, except the feedback will be obtained electronically. A feedback forum and an interactive version of the Ecological Footprint Calculator will be created for public access on the website. These results will be tabulated and updated weekly by the Web/Media Team. Through the accumulation of these test and research results, each subteam will bring its results back to the entire team where each member will have the opportunity to brainstorm ideas on how to improve the project. Once the solutions have been discussed, each subteam will readjust and create an update to its section of the project.

E. Analysis

The goals of this semester's IPRO are divided into three main categories. The first being the outreach and education of high school and junior high school students around the Chicago metropolitan area by means of two teaching modules currently in development. The second is to create a teaching kit that will be available to instructors, to educate students in their own classrooms. The third is to develop a well running website that, available to anyone with computer access, allows people to learn more about this IPRO, and our mission. All three categories, can be analyzed, to determine if they were a success.

The outreach and education of high school and junior high students will be measured in two ways. The first is a pre and post-test regarding the material presented in the classrooms. These tests were developed by a previous IPRO semester, and are proven to determine the level of knowledge-retention during our lectures. The second, being feedback gained from the instructors, on the effectiveness of teaching techniques throughout the presentations.

The effectiveness of the teaching kit can be recorded through one-on-one feedback from teachers. By collecting reactions and suggestions from teachers who will test the kit for themselves in the classroom, the Education team can improve the kit.

The HowManyEarths.com website can also be measured in two different ways. The first is through the feedback forum, currently under construction, that will allow us to obtain opinions on the effectiveness of not only the website but all materials created by the IPRO. The second form of analysis will be the online quiz available to the general public, which will ask a series of question related to content online. The quiz will allow us to see if the information provided on the website is be absorbed by viewers.

In addition we will use the previous semester's analysis as a base to compare and determine how large an impact we are creating.

F. IPRO Deliverables

Previous IPRO deliverables will be used as a basis for this semester's deliverables. The deliverables will include the required documents listed under the IPRO nuggets. These include a project plan, an abstract statement, a midterm and final presentation, and a grant proposal. Other non-required deliverables that we created are a website, a teaching kit, two educational videos, and two teaching modules. Our project notebook will document our process and incorporate ideas that future IPRO's may build upon. Our project plan and schedule will guide our objectives and the time lines of their delivery. We will work as a united group to assure that all deliverables are completed on schedule.

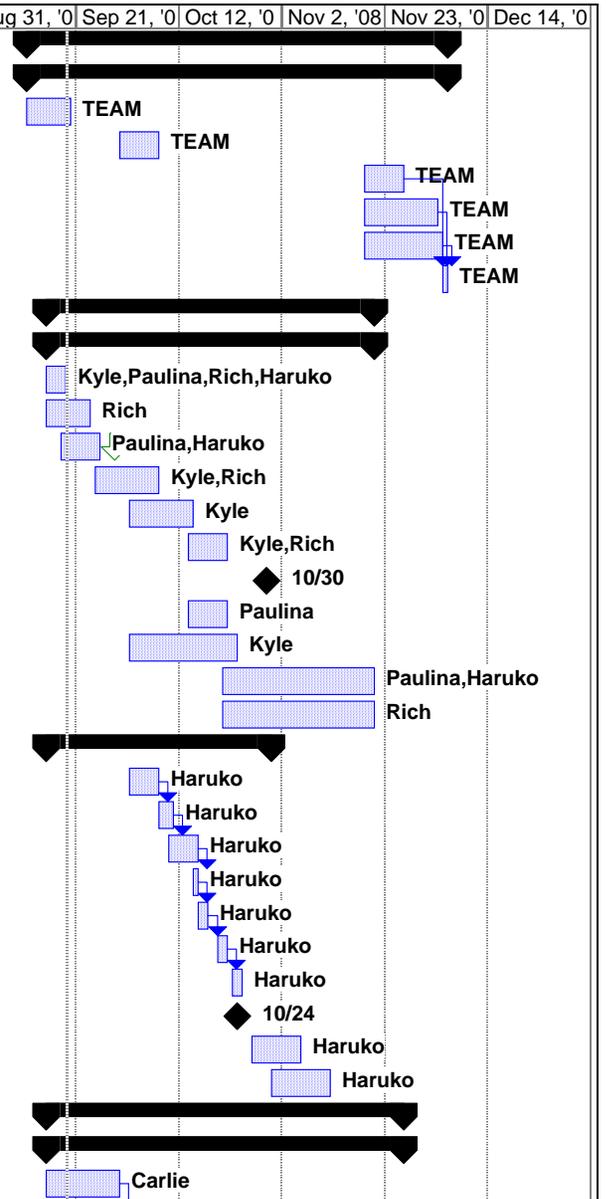
G. Expected Results

The goal of this IPRO is to make an enormous impact on students, especially in the Chicago metropolitan area. The previous semester of this IPRO reached out to high school students only; this semester we also plan to make a worthwhile impression on junior high school students. We want to increase young consumers' awareness of their Ecological Footprints on our planet. The Ecological Footprint module will initially be presented, and the Cradle-to-Cradle module will be completed and presented. We will present the Ecological Footprint module and the Cradle-to-Cradle module to fifteen classrooms in multiple schools with a variety of curriculums. We will create a Teaching Kit to enable educators to present this information on their own. Once the kit is completed we will market it to interested educators across the country. The kit will include the presentation itself, extra-curricular activities, and other useful educational material. We will improve the webpage this semester by editing our literature, updating the facts, adding a feedback commentary, refreshing links, making new videos, and ultimately refining the webpage to be user-friendly. Finally, this semester we will obtain sponsorship and grant money and participate in community activities and seize all opportunities to broadcast our message.

H. Schedule of Tasks & Milestone Events

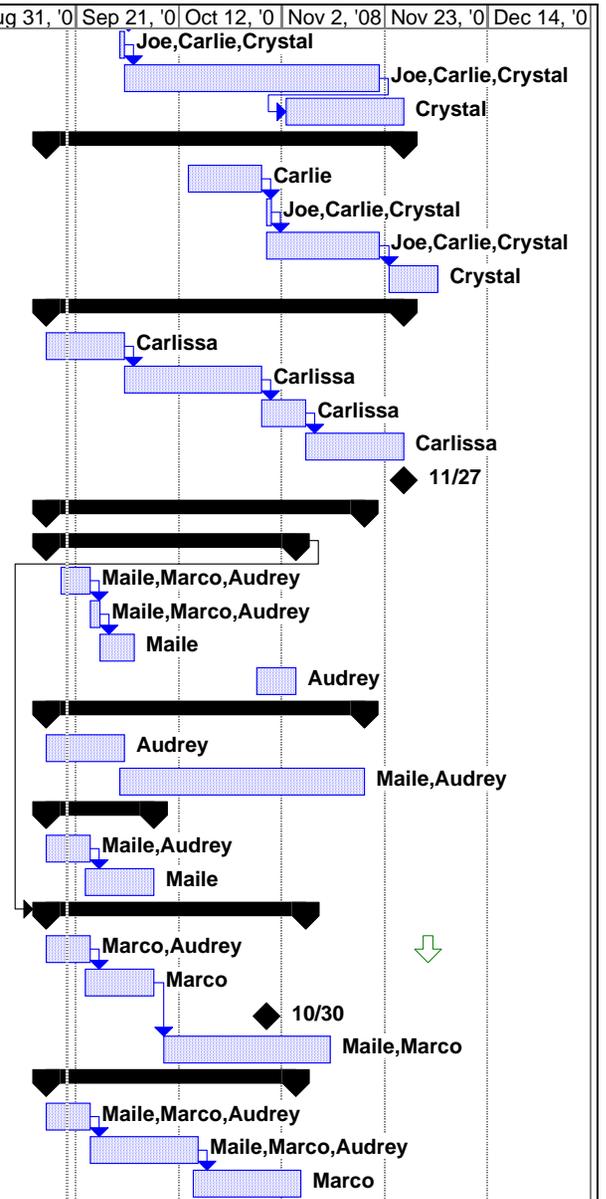
Please view attached Gantt chart or visit [iGROUPS Files > Administrative Materials > Team Schedule](#).

ID	Task Name	Duration	Start	Finish	Jul 20, '08	Aug 10, '08	Aug 31, '08	Sep 21, '08	Oct 12, '08	Nov 2, '08	Nov 23, '08	Dec 14, '08
1	I PRO 332-Our Energy Future	62 days?	Thu 9/11/08	Fri 12/5/08								
2	I PRO Deliverables	62 days?	Thu 9/11/08	Fri 12/5/08								
3	Project Plan	7 days	Thu 9/11/08	Fri 9/19/08								
4	Midterm Presentation	6 days	Tue 9/30/08	Tue 10/7/08								
5	Exhibit & Abstract	6 days	Wed 11/19/08	Wed 11/26/08								
6	Final Presentation	11 days	Wed 11/19/08	Wed 12/3/08								
7	Final Report	12 days	Wed 11/19/08	Thu 12/4/08								
8	I PRO Day	1 day?	Fri 12/5/08	Fri 12/5/08								
9	WEB/MEDIA	49 days	Mon 9/15/08	Thu 11/20/08								
10	Redesign of HowManyEarths.com	49 days	Mon 9/15/08	Thu 11/20/08								
11	Research/Understanding current web files	4 days	Mon 9/15/08	Thu 9/18/08								
12	Elimination of PDFs	7 days	Mon 9/15/08	Tue 9/23/08								
13	'Who we are' link edit	6 days	Thu 9/18/08	Thu 9/25/08								
14	Compiling calendar	9 days	Thu 9/25/08	Tue 10/7/08								
15	Interactive quiz	9 days	Thu 10/2/08	Tue 10/14/08								
16	Feedback forum	6 days	Tue 10/14/08	Tue 10/21/08								
17	Website feedback received	0 days	Thu 10/30/08	Thu 10/30/08								
18	Teaching tools tab	6 days	Tue 10/14/08	Tue 10/21/08								
19	Resources-library tab	16 days	Thu 10/2/08	Thu 10/23/08								
20	Kid's corner	23 days	Tue 10/21/08	Thu 11/20/08								
21	New footprint calculator	23 days	Tue 10/21/08	Thu 11/20/08								
22	Energy Consumption Films	34 days	Mon 9/15/08	Thu 10/30/08								
23	Research of film script material & content	4 days	Thu 10/2/08	Tue 10/7/08								
24	Write first draft of script	3 days	Wed 10/8/08	Fri 10/10/08								
25	Edit script & write final draft	4 days	Fri 10/10/08	Wed 10/15/08								
26	Practice run of script	1 day?	Wed 10/15/08	Wed 10/15/08								
27	Filming on location, Day One	2 days	Thu 10/16/08	Fri 10/17/08								
28	Filming on location, Day Two	2 days	Mon 10/20/08	Tue 10/21/08								
29	Filming on location, Day Three	2 days	Thu 10/23/08	Fri 10/24/08								
30	Filming completed	0 days	Fri 10/24/08	Fri 10/24/08								
31	Film editing	8 days	Mon 10/27/08	Wed 11/5/08								
32	Sound editing	8 days	Fri 10/31/08	Tue 11/11/08								
33	EDUCATIONAL MATERIALS	53 days	Mon 9/15/08	Wed 11/26/08								
34	Module One (Ecological Footprint)	53 days	Mon 9/15/08	Wed 11/26/08								
35	Edit powerpoint slides	11 days	Mon 9/15/08	Mon 9/29/08								



Project: I PRO 332-Fall 08 Date: Fri 9/19/08	Task		Rolled Up Task		External Tasks	
	Progress		Rolled Up Milestone		Project Summary	
	Milestone		Rolled Up Progress		Group By Summary	
	Summary		Split		Deadline	

ID	Task Name	Duration	Start	Finish	Jul 20, '08	Aug 10, '08	Aug 31, '08	Sep 21, '08	Oct 12, '08	Nov 2, '08	Nov 23, '08	Dec 14, '08
36	Practice presentation	1 day?	Tue 9/30/08	Tue 9/30/08								
37	Class presentations	38 days	Wed 10/1/08	Fri 11/21/08								
38	Feedback Analysis	18 days	Mon 11/3/08	Wed 11/26/08								
39	Module Two (Cradle-to-Cradle)	53 days	Mon 9/15/08	Wed 11/26/08								
40	Edit powerpoint slides	11 days	Tue 10/14/08	Tue 10/28/08								
41	Practice presentation	1 day?	Thu 10/30/08	Thu 10/30/08								
42	Class presentation	17 days?	Thu 10/30/08	Fri 11/21/08								
43	Feedback Analysis	8 days	Mon 11/24/08	Wed 12/3/08								
44	Teaching Kit	53 days	Mon 9/15/08	Wed 11/26/08								
45	Research of materials	12 days	Mon 9/15/08	Tue 9/30/08								
46	Beta testing (module one) with familiar tea	20 days	Wed 10/1/08	Tue 10/28/08								
47	Feedback & editing	7 days	Wed 10/29/08	Thu 11/6/08								
48	Beta testing (module two) with familiar tea	14 days	Fri 11/7/08	Wed 11/26/08								
49	Teaching kit completed	0 days	Thu 11/27/08	Thu 11/27/08								
50	MARKETING	47 days	Mon 9/15/08	Tue 11/18/08								
51	Brand	37 days	Mon 9/15/08	Tue 11/4/08								
52	Editing logo	4 days	Thu 9/18/08	Tue 9/23/08								
53	New promotional material design	2 days	Wed 9/24/08	Thu 9/25/08								
54	Creating & Printing business cards	5 days	Fri 9/26/08	Thu 10/2/08								
55	Website launch promotion	6 days	Tue 10/28/08	Tue 11/4/08								
56	Press/Media	47 days	Mon 9/15/08	Tue 11/18/08								
57	Contacting local media	12 days	Mon 9/15/08	Tue 9/30/08								
58	Follow ups & meetings	36 days	Tue 9/30/08	Tue 11/18/08								
59	Public Events	16 days	Mon 9/15/08	Mon 10/6/08								
60	Research event opportunities	7 days	Mon 9/15/08	Tue 9/23/08								
61	Schedule all events	10 days	Tue 9/23/08	Mon 10/6/08								
62	Sponsorship/Funding	39 days	Mon 9/15/08	Thu 11/6/08								
63	Sponsorship research	7 days	Mon 9/15/08	Tue 9/23/08								
64	Contacting five potential sponsors	10 days	Tue 9/23/08	Mon 10/6/08								
65	\$500 funding received	0 days	Thu 10/30/08	Thu 10/30/08								
66	Press kit distribution	24 days	Thu 10/9/08	Tue 11/11/08								
67	Grant Proposal	37 days	Mon 9/15/08	Tue 11/4/08								
68	Research grant possibilities	7 days	Mon 9/15/08	Tue 9/23/08								
69	Draft proposal	16 days	Wed 9/24/08	Wed 10/15/08								
70	Edit proposal & finalize	16 days	Wed 10/15/08	Wed 11/5/08								



Project: IPRO 332-Fall 08 Date: Fri 9/19/08	Task		Rolled Up Task		External Tasks	
	Progress		Rolled Up Milestone		Project Summary	
	Milestone		Rolled Up Progress		Group By Summary	
	Summary		Split		Deadline	

5.0 Project Budget

Item	Cost	Purpose
Marketing Team		
Press Kit (CD demo, envelopes, postage)	\$40	Collecting sponsors and funding
Posters	\$75	Advertising public events
Business Cards	\$25	Team use and distribution
Flyers	\$25	Advertising public events
Calculators/Stickers	\$50	Classroom presentations
Public Event Registration	\$100	Event appearances
Team Items(Shirts, bag and pin)	\$50	Team use
Education Team		
Teaching Kit	\$300	Distribution to teachers
Gas	\$60	Transportation to schools
Posters	\$20	Placing in classrooms
Web/Media Team		
Website server	\$30	HowManyEarths.com
Total	\$775	

6.0 Team Structure & Assignments

A. Team Members

Name	Major/ Minor	Year	Skills	Interests
Colburn, Charleen	Political Science/ Math	Senior	MS Word, Powerpoint, Working with young students	Politics, hockey, coffee
Fujimoto, Haruko	Architecture	Senior	AutoCAD, 3ds Max, Photoshop, Illustrator, Final Cut Pro, film making	Films, photography, traveling, crafting
Galo, Audrey	Architecture	Senior	MS office, AutoCAD, 3ds Max, Photoshop, Illustrator, Dreamweaver, Spanish, research skill	International music, traveling, design, art, drawing, baking, cooking
Guglielmo, Kyle	Civil Engineering	Junior	MS office, AutoCAD	Baseball
Jackson, Carlissa	Psychology/ Education	Senior	MS office, SPSS, HTML, Dreamweaver, Java, IP configuration, teaching students	Volunteering at grand families and cps, writing poetry, cooking, dancing
Jurasits, Joseph	Engineering, Physics	Senior	Researching, presenting	Sports, bike riding, music
Ndoping, Marco	Electrical Engineering	Junior	MS office, French, marketing research experience	Basketball, soccer, music, politics, technology
Rennard, Maile	Electrical Engineering	Junior	AutoCAD, teaching, tutoring, interacting with students	Tennis, photography, dancing
Reynolds, Crystal	Psychology/ Biology	Senior	MS Office, editing, researching literature, Spanish	Medical Science, grammar
Roslund, Richard	Computer Science	Junior	HTML/PHP/MYSQL Coding, Open-Office, Powerpoint,	Lifting, friends, WWII
Szpiech, Paulina	Architecture	Senior	Graphic design, public speaking, language skill, research skill, organization skill	Architecture, fashion design, product design, art, media, travel

B. Team Leaders and Sub Teams

Team Leader: Audrey Galo

Sub-Teams:

Web/ Media Team

Team Leader: Kyle Guglielmo

Members: Haruko Fujimoto, Richard Roslund, Paulina Szpiech

Web/ Media Team works on developing the existing web page from previous IPRO. They improve the site so that the web works more smoothly and is up-to-date. They also create a kids section on the web which offers more visual and interacting tools. They are also responsible for creating new videos teaching the environmental issues.

Marketing Team

Team Leader: Maile Rennard

Members: Audrey Galo, Marco Ndoping

Marketing team seeks sponsorships and funding and creates a grant proposal. They are also responsible for promoting our projects, such as an appearance in media. They also work on the promotional materials, such as business cards and fliers.

Education Team

Team Leader: Joseph Juresits

Members: Carlissa Jackson, Charleen Colburn, Crystal Reynolds

Education Team is responsible for visiting Chicagoland schools and teaching the environmental issues to students by presenting our modules. They keep developing the modules based on the feedback from schools, as well as brainstorm ideas for new modules. They are also responsible for finalizing the Teaching Kit.

C. Designation of Roles

Team Member

Assigned Tasks

Colburn, Carlie

IPRO Educational Team-Member
Module Creation
Module Research
Presenting

Fujimoto, Haruko

IPRO Website/Media Team-member
Graphics
Video Coordinator

Galo, Audrey

IPRO Team Leader
IPRO Marketing Team Member
Agenda Maker
Time Keeper
Press/Media

Guglielmo, Kyle

IPRO Website/Media Team Leader
Public Relations
Quiz Section
Video Creation

Jackson, Carlissa	IPRO Marketing Team Member School Contacting
Jurasits, Joseph	IPRO Educational Team Member Module Research Presenting
Ndoping, Marco	IPRO Marketing Team Member Master Schedule Maker Sponsorship/Funding Grant Proposal
Rennard, Maile	IPRO Marketing Team Leader Minute Taker Weekly Timesheet Collector IGroups Organizer Events Scheduling Branding
Reynolds, Crystal	IPRO Educational Team Member Kit Creation Presenting
Roslund, Rich	IPRO Website/Media Team Member Technical Support Resident Coder Uploading
Szpiech, Paulina	IPRO Website/Media Team-member Creative Director Graphics