

Project Plan

IPRO 332: Our Energy Future

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Illinois Institute of Technology

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1.0 Objectives

Our objectives for this semester are to:

- (1) Develop a teaching kit containing curriculum to present the Ecological Footprint module and instructional materials designed to help teachers teach the module. Use the teaching kit as a means of spreading our module beyond our immediate scope, to high school teachers, college campus organizations and volunteer based groups.
- (2) Develop a website to enrich the experience of the module, provide a professional contact interface and deliver our educational message to a broader audience.
- (3) Promote How Many Earths and education on resource consumption by developing marketing plan, publishing stories in local media outlets and capitalizing on publicity opportunities.
- (4) Continue to reach out to high school students by visiting more Chicago-land high schools, continuing to present the Ecological Footprint module and beginning to present the Cradle-to-Cradle module.
- (5) Refine the Cradle-to-Cradle presentation by analyzing feedback and response of pupils.
- (6) Continue to collect and analyze feedback from students and teachers concerning both of the modules, our presentation style and the teaching kit. Use this information to continually enhance the learning experience.

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.

Over the past year, “green” became the buzzword that screams for attention in every media outlet around the world. “Green” was often paired with automobiles, houses, appliances and even airplanes to advocate energy saving and the noble act of saving our planet. But there are countless other things that an ordinary citizen can do to save our planet as well. IPRO 332 Spring 2008’s project continues to undertake the goal to educate young adults to be energy conscious.

The project will utilize existing material available via the World Wide Web and organize the info into an easy to understand and concise way. The bulk of the presentation will be comprised of a PowerPoint presentation in which various sources of energy are briefly talked about and the idea of the ecological footprint is introduced. The presentation will be either followed or preceded by a short survey that shows how each student’s behavior affects the ecology.

Because this is a continuation IPRO, the current-semester's team will evaluate the pros and cons of the previous semester via continuation team members. The team will also use resources available via new members to enhance the presentation.

Ethics is still an issue that the team will be concerned about during this project because one of the goals is to keep the project un-biased and informative. The previous team seems to have accomplished this successfully according to feedback received. The current team plans to build on this and continue to remain unbiased as new materials and methodologies are added to the project.

Finally, the current team wants to establish a strong sustainability for the project by developing a kit that would train teachers on how to incorporate the presentation material into class curriculum

and even conduct the presentation. Other outreach activities include campus outreach and possible ads on the local media.

3.0 Methodology

A. Problem

With the growing need to raise awareness with respect to the ever-changing climatic conditions that we face on this planet, the challenge to harvest such awareness amongst high school aged individuals has been placed in front of us. A base for solving this problem has been established for this IPRO over past semesters with the establishment of a two class period presentation for high school students concerning the topic of the ecological footprint (how much does one consume), which was presented to several high schools in the Chicago metropolitan area. It is now the problem of the current IPRO to investigate and implement tactics in order to harvest awareness among individuals on a much greater scale than those select individuals whom we may give a physical presentation. The questions in front of us now are: (1) How can this information be delivered without team members physically having to deliver the presentation; (2) How can awareness of the work that has been done and its availability be harvested among individuals outside of those who have participated in a physical presentation; and (3) How can this information be tailored to the individuals intellectual and interest levels?

B. Problem Solution

IPRO 332 will address the problem of expanding the organization in three key ways. Last semester, the team focused on creating new modules including building on the Ecological Footprint. Along with expanding and improving the presentations, the team made it a goal to reach more schools. This semester's team found it important to continue with what previous teams were working on, but expanding it further by finding a way for other organizations to spread the cause without the teams' physical presence. The first way to accomplish this was to develop a starter kit that will be distributed to teachers. This kit will basically consist of the original presentations by the team and how to teach them, the Ecological Footprint module and tests, along with other games, worksheets, and projects to aid the teacher. The second way that IPRO 332 will use to expand the organization is by creating a website that will be advertised to the general public, focusing on both students and adults who are interested in furthering their knowledge of the issue of energy. The third important step that will be taken is to better market the cause to the general public by creating a name and slogan for the organization and advertising it through posters, newspapers, radio stations, and any other way to make the cause known. By doing so, people will become aware of the issue and hopefully want to learn more.

The steps that have been taken to materialize these three goals was to break up into three different sub teams which would each take on one goal, the outreach team, the website team, and the marketing team. Each sub team will then have separate steps in completing the assigned task; however each will need to go through the following:

1. Researching possible ideas
2. Create a system of research filters and evaluation criteria for application to these ideas.
3. Analyze how the ideas fair when set against the filters and criteria.
4. Determine which of the ideas will be most realistic, efficient, and successful
5. Execute the chosen ideas

Although this is an involved process, it is quite reasonable for our team to complete these tasks. We have a great deal of manpower, and as long we practice proficient project management, we will be able to achieve our goals.

C. Testing

Analyzing our audiences' interest and reaction to our project is essential to the improvement of the product and services we aim to provide. This year our audience has expanded outside of the classroom seeking partnerships and sponsors with organizations and companies engaging in similar outreach interests, including an increased number of classrooms in which to promote awareness, and comprising of an interactive and informative website that will be catered to the general publics' curiosity and involvement pursuits. Three corresponding sub teams will deliver our outreach to these audiences: the marketing team, the outreach team, and the web team. These teams will all take measures into analyzing our effort's effect with the activity or feedback we receive from product drives or retail sales, student and teacher surveys and engagement, and web interaction and exploration activity. By sub-dividing our objectives within the sub-teams we expect to have a strong concentration with the objective goals and efficiency with our deliveries.

D. Documentation of test and research results

The same process of documenting and testing the presentation that was created by last semester's team will be used this semester also, which included a pre test, post test, survey and Ecological Footprint calculator. However, this process will be expanded by creating a follow up worksheet for each student to complete which examines the individuals' energy use in their home and whether or not it has improved after going through the presentation. Including documenting the results of the presentation, feedback from teachers on the starter kit will also be accumulated. The data from these documents will be archived according to school and date. After studying the feedback and the tests, the outreach team will have a summary of the good and bad aspects of the presentation and kit. This summary will then be presented to the whole team and each member will have the opportunity to brainstorm ideas on how to improve the project. Once the solutions have been discussed, the outreach team will create an updated version of the project.

E. Analysis

Part of the objective of this IPRO is to analyze the effectiveness of our ecological footprint curriculum and general subject matter on individuals whom experience the material presented. This analysis falls under two categories: immediate impact and lasting impact.

The immediate impact of the material can be analyzed in terms of the clarity of the material presented as well as interest in the material. The way that this can be measured is through the use of a pre and post-test regarding the presented material, which is an aspect of the IPRO that is a continuation from the previous semester's work. The fact that this is a continuing aspect will allow us to have a base set of results to compare with results gathered from presentations given this semester.

The lasting impact of the material is a new aspect, which this IPRO wishes to measure and analyze. This concept of analysis hopes to understand what the actual interest level is regarding this topic among individuals who have experienced the presentation. The means for conducting this level of analysis is conceptualized as a survey to be conducted among said individuals

regarding change in consumption habits since experiencing the presentation. Ideally this survey would be a log of consumption habits conducted over a period of a few weeks.

F. IPRO deliverables report

Previous IPRO deliverables will be used as a guide to expanding our deliverables and as the high initial bar of improving our outcomes in conjunction with creating new target objectives. We will build upon and fine-tune old modules and carefully examine past pursuits and incorporate new pursuits. Our 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 timeliness of their delivery. We all will work as a team intending equal and grand individual efforts with no one member becoming overwhelmed. Our communication is undeniably strong and a facilitator for achieving our goals.

4.0 Expected Results

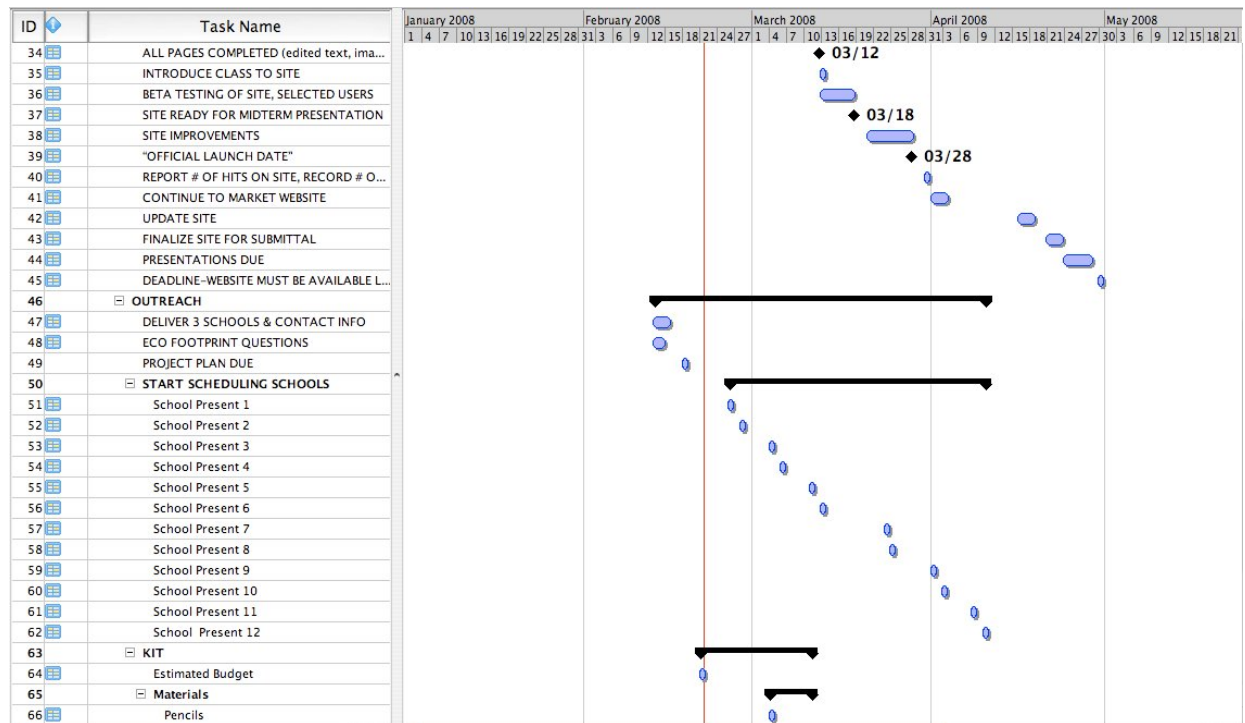
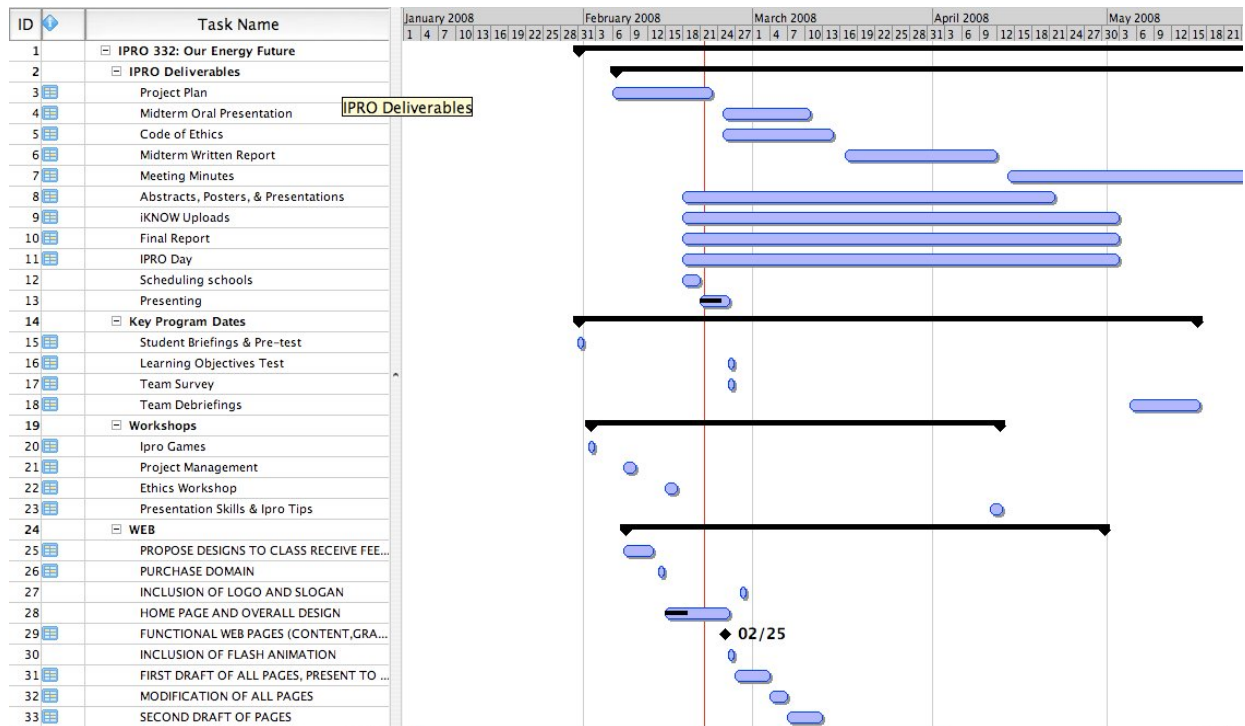
The goal for this IPRO is to leave a bigger impact on the high school students we are able to reach and increase awareness about our program. This semester we will present in 12 different Chicago Public High Schools. We will present the Ecological Footprint module once again, while attempting to improve our presentation with the implementation of the Cradle-to-Cradle module that was developed in the previous semester, but never tested. This group will also develop a starter kit consisting of the presentation itself, along with extra activities, which can be sent to teachers across the nation to teach their students our presentation without our group having to be present. A website will also be developed this semester as well as various tools to market our project.

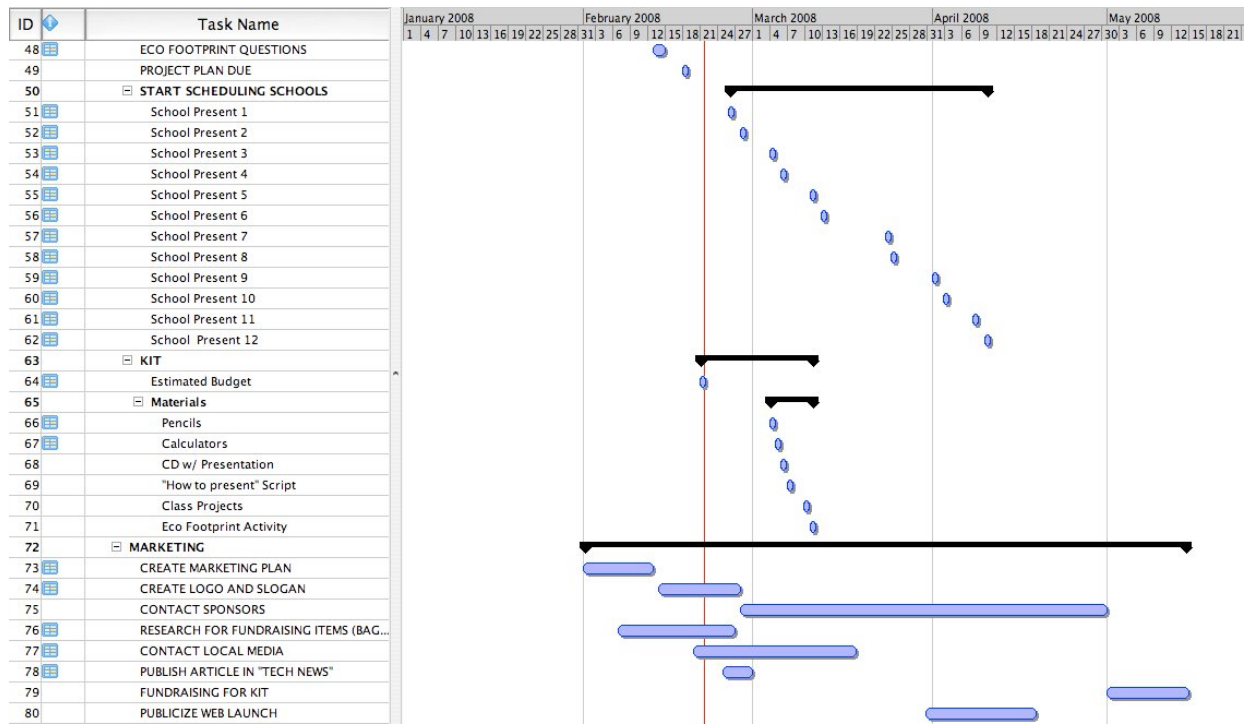
5.0 Project Budget

Item	Price	Purpose
Website (\$10 a month for 12 months)	\$120	Follow-up Information and promotional use
Stickers (1000 count)	\$40	Promotional use (hand out to students)
Bags	\$150	Promotional use
Posters	\$50	Promotional use
Kit (papers, CD, packaging, & freebies)	\$200	Give to teachers (teach own class)
Supplemental material	\$100	Handouts during presentation
Shirts (polos)	\$250	Team use (one for each member)
Transportation	\$250	Getting to and from schools, gas
Refreshments	\$50	Team use
Total	\$1,210	

6.0 Schedule of Tasks and Milestone Events

For the most up to date Gantt charts, please go to iGROUPS Files > Administrative Materials > Project Management > Gantt Chart.





7.0 Individual Team Member Assignments

A. Team Members

	Major	Year	Skills	Interests
Carmen Aguilar-Wedge	Civil Engineering	3 rd	Bilingual (English/Spanish) Microsoft Office, CAD, Adobe Illustrator, Cost Works, Primavera, C++, MathCAD	Art, Architecture, Traveling, Shoes, Volleyball, Dance, Music
Alfredo Garcia	Electrical Engineering		Bi-lingual English/Spanish Excellent communication /public speaking and leadership skills	Music, Dancing, Working out, Family
Kaitlyn Connley	Civil Engineering	3 rd	Skyscrapers, Design & Imagination, Reading, Writing, Photography, Politics, Arts, Music & Sciences, Environment, Holistic Medicine, Cooking	Sky Scrapers Computer Applications & Basic Computer Programming, Mathematics, Foreign Languages (French), Photography, Conceptual Design, Musician
Andrew Mey	Civil Engineering	3 rd	Microsoft Office, Adobe InDesign, Carpentry	Friends, Family, Camping, Hiking, Construction
Maile Rennard	Electrical Engineering	3 rd	Excel in typing skills, use of Microsoft word, excel, PowerPoint	Hanging out with friends, taking pictures, dancing, experiencing new places and things, tennis
Samantha Stanley	Professional and Technical Communications	4th	Technical editing, proficient in Microsoft Project, project management experience, Communication, Leadership and teamwork training	Swimming, Alpha Sigma Alpha sorority, running, singing
Dariusz Bunda	Electrical Engineering	4th	Bi-lingual English and Polish, Leadership, Team work, Organization, Project Management, MS Office, and Auto CAD	Automobile Technology, Music, Working out, Alternative Energy
Sarah Stone	Political Science	4th	Adobe InDesign, AutoCAD, Microsoft Office, previous public speaking experience, marketing experience	Marathon training, swimming, playing violin & steel drum
Minh Nguyen	Electrical Engineering	4th	Matlabs, AutoCAD	Energy-efficient power electronic applications, power system operation
Rohan Mehta	Computer Engineering	4th	Programming (Java, C++), Adobe Flash	Computer games, traveling, working out, soccer, new technology, photography
Alex Di Sciullo Jones	Materials and Aerospace	3 rd	Proficient in Microsoft Office, computer programming (MATLAB and C++), finding contacts for sponsors and media, marketing, efficient worker	Alternative energy, transportation safety, cinema, literature, music, travel
Matthew Walczuk	Architecture	5th	Digital Media (web technology + graphic arts)	Design Theory, Social Sciences, Ecology, Philosophy, Building Technology
Audrey Galo	Architecture	4th	MS Office, AutoCAD, 3d Studio Max, Photoshop, Illustrator, Dreamweaver, Bilingual (Spanish), Research ability	Interests: International music, traveling, design, art, drawing, baking, cooking

B. Team Leaders & Sub-Teams

Team Leader:

Dariusz Bunda

Sub-Teams:**Outreach:**

Alfredo Garcia, Carmen Aguilar-Wedge, Minh Nguyen, Maile Rennard, Dariusz Bunda, Samantha Stanley

Leader: Alfredo Garcia

Web Development:

Audrey Galo, Matt Walczuk, Rohan Mehta

Leader: Audrey Galo

Marketing:

Sarah Stone, Kaitlyn Connley, Andrew Mey, Alex Di Sciullo Jones

Leader: Sarah Stone

Outreach sub-team is responsible for going to schools and giving the “How Many Earths Presentation” & implementing the cradle-cradle module to the classrooms. Outreach will try to reach 12-14 Schools, speaking directly to a minimum of 400 Students. The group will also be responsible for getting the “kit” together to pass on to teachers/other student organizations so they can do the presentations at their local high schools.

Web Development sub-team will be entering the web contest, creating a website that is functional and gives: Contact, Downloadable kit, feedback, blog, online resources, and online community.

Marketing sub-team is responsible for coming up with ideas for: Branding, Name, Logo, & Slogans; Marketing through Flyers, T-shirts, Posters, IIT Today, IIT newspaper, Patches, Pencils, Calculators, and Sponsors. The Marketing group will also be responsible for the budget.

8.0 Designation of Roles

Team Member	Assigned Tasks
Aguilar-Wedge, Carmen	IPRO Games Participant Project Management Workshop Participant Project Manager Meeting Minutes Keeper Project Schedule Coordinator Skills and Interests Compiler
Bunda, Dariusz	IPRO Team Leader IPRO Games Participant Project Management Workshop Participant Ethics Seminar Participant
Conley, Kaitlyn	IPRO Games Participant Project Management Workshop Participant EnPro Business Planning Lecture: Conducting Market Research Participant Project Notebook Coordinator Methodology/Work Structure Creator
DiSciullo-Jones, Alex	Project Management Workshop Participant Project Budget Creator Ethics Seminar Participant
Galo, Audrey	IPRO Games Participant Website Team Leader Designation of Roles Creator
Garcia, Alfredo	IPRO Games Participant Project Management Workshop Participant Outreach Team Leader Expected Results Creator Ethics Seminar Participant
Mehta, Rohan	IPRO Games Participant Schedule of Tasks Creator Ethics Seminar Participant
Mey, Andrew	Project Management Workshop Participant Project Budget Creator
Nguyen, Mihn	Background Creator
Rennard, Maile	IPRO Games Participant Project Management Workshop Participant Methodology/Work Structure Creator

	Ethics Seminar Participant
Staley, Samantha	Project Management Workshop Participant Ethics Workshop Participant Objectives Creator Ethics Seminar Participant
Stone, Sarah	Project Plan Editor Marketing Team Leader Project Deliverables Coordinator
Walczuk, Matthew	Methodology/Work Structure Creator