IPRO 332: OUR ENERGY FUTURE

Midterm Presentation:
March 27, 2007

Project Team: Andrew Martin
Michael Lagiglio
Sarah J. Leingang
Tony Osborn
Sara Pfau
Sasha Romanova Smith
Kurt Ziegel
I. Objectives
Original Objectives

• Create unbiased energy education module
• Identify knowledge deficits
• Select areas to focus efforts.
• Study teaching methods and technologies.
• Learn from other groups who are currently doing energy education.
• Ascribe to CPS Guidelines.
Current Objectives

- Develop Ecological Footprint module
- Test Ecological Footprint module at De La Salle
- Propose additional modules
- Establish contact with CPS
Changes to Objectives

1. Shift focus away from CPS
2. Test module at De La Salle
3. Define main module as the Ecological Footprint
4. Creation of additional, energy specific modules
Reasons for changes in Objectives

1. Bureaucracy/Politics
2. Close location, cooperation, community development
3. Holistic approach
4. More effective
II. Results to Date
Team Results

- Topic research
  - Ecological Footprint
  - Quiz through myfootprint.org
- BP A+ for Energy
- Subsequent topics, wind power
  - Contact at IL Wind Power, Steve Cox
- Research into classroom experience
  - Preparing the prototype
Summary Diagram for Ecological Footprint
# My Footprint

## Quiz Results

<table>
<thead>
<tr>
<th>Category</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>4</td>
</tr>
<tr>
<td>Mobility</td>
<td>2</td>
</tr>
<tr>
<td>Shelter</td>
<td>3.5</td>
</tr>
<tr>
<td>Goods/Services</td>
<td>4.9</td>
</tr>
<tr>
<td><strong>Total Footprint</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

In comparison, the average ecological footprint in your country is 24 acres per person.

Worldwide, there exist 4.5 biologically productive acres per person.

If everyone lived like you, we would need 3.2 planets.

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<thead>
<tr>
<th>Category</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>3.2</td>
</tr>
<tr>
<td>Mobility</td>
<td>2</td>
</tr>
<tr>
<td>Shelter</td>
<td>1.7</td>
</tr>
<tr>
<td>Goods/Services</td>
<td>3.5</td>
</tr>
<tr>
<td><strong>Total Footprint</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

In comparison, the average ecological footprint in your country is 24 acres per person.

Worldwide, there exist 4.5 biologically productive acres per person.

If everyone lived like you, we would need 2.3 planets.
Ongoing Tasks

ID | Task Name | Resource Names
---|-----------|-----------------|
1 | Phase 1 Research <Program sub-team> | Program Sub-Team
2 | Research curriculum at CPS | Kurt Ziegel, Andy Martin
3 | find gaps in curriculum | Program Sub-Team
4 | contact a De La Salle curr. Director | Andy Martin, Kurt Ziegel
5 | contact a La Salle science teacher | Kurt Ziegel, Andy Martin
6 | Prepare for teacher interview | Program Sub-Team
7 | attend stiff meeting | Entire Team
8 | interview a teacher | Program Sub-Team
9 | record findings | Program Sub-Team
10 | Research other sources | Andy Martin
11 | museum visit | Program Sub-Team
12 | internet | Program Sub-Team
13 | publications | Program Sub-Team
14 | review videos on the subject | Entire Team
15 | Research new methods | Program Sub-Team
16 | internet | Program Sub-Team
17 | publications | Program Sub-Team
18 | review videos on the subject | Entire Team
19 | Phase 1 Research<Subject Matter sub-team> | Program Sub-Team
20 | Research | Program Sub-Team
21 | Define Objectivity Criteria | Entire Team
22 | research precedent organizations | Entire Team
23 | determine criteria | Entire Team
24 | define "balanced" | Entire Team
25 | Final Research | Entire Team
26 | compile objective information | Entire Team
27 | write research papers on chosen topics | Entire Team
28 | Phase 2 Implementation <Entire Team> | Entire Team
29 | formal research for delivery | Sarah Leingang, Sara Pfau, Mike Lagiglio
30 | design prototype module | Sarah Leingang, Kurt Ziegel
31 | insert research in module | Sarah Leingang, Sasha Romanova-Smith
32 | edit for delivery | Andy Martin, Tony Oseborn
33 | test in classroom | Entire Team
34 | interpret results | Entire Team
35 | Deliverables | Entire Team
36 | Project Plan | Entire Team
37 | BIP Ar Grant Proposal | Entire Team
38 | Final Report | Entire Team
39 | IPRO Day deliverables | Entire Team
40 | poster | entire team
41 | abstract | entire team
42 | CD-Rom | entire team
43 | iKnow submissions | entire team
44 | PowerPoint presentation | entire team
45 | meeting minutes submission | entire team
46 | IPRO DAY | entire team
Accomplishments

- Project objectives clearly defined
- BP A+ for Energy grant proposal
- Connections with De La Salle
  - Bob Chrupka
  - Access to girls and boys campuses
- Wind turbine research
  - Source, budget
- Team is working within schedule
III. Revised Tasks & Event Schedule
Implementation Changes
BP A+ for Energy Grant
Team Member Losses
IV. Updated Tasks & Roles
Subject Matter Sub-group

Sarah Leingang

Original
- Categorization of themes
- Topic research

Updated
- Research and summarize Ecological Footprint concept
- Wind turbine and viability research
- Grant proposal budget development
- Development of IPRO Day presentation
Sara Pfau

Original
- Constructing surveys
- Topic research

Updated
- Summarize energy big picture
- Research and summarize Ecological Footprint
- Compose Project Evaluation portion for Grant Proposal
- Design layout for IPRO Day presentation
Tony Osbon

Original
- Time Sheet Manager & Time Keeper
- Schedule Monitor
- Precedent Surveys
- Objectivity Criteria

Updated
- Project Plan construction
- Grant Proposal design and rough draft
- Design and construction of Ecological Footprint module
Program Team Sub-group
Mike Lagiglio

Original
- Design paper layout
- Teacher interviews
- Web site design

Updated
- Teaching technique research
- Web design
- De La Salle contact
- Analysis and incorporation of feedback from De La Salle
Andy Martin

Original
- Team leadership
- Agenda management
- Sub-group leadership
- Module design

Updated
- Same as above
- Grant Proposal construction
- IPRO Day presentation design
Sasha Smith

**Original**
- Meeting minutes
- Web site design
- Presentation design

**Updated**
- Meeting minutes
- Program management (Microsoft Project)
- Research into games as teaching tools
- Design and construction of Ecological Footprint module
Kurt Ziegel

Original
- Curriculum research
- Presentation design
- Define Power Point layout

Updated
- Product research
- Interactive technology research
- Technology viability study
- Assessment of Program Sub-group findings
- Construction of Ecological Footprint module
V. Barriers & Obstacles
Difficulties:

— Loss of new team member
— Grant Proposal
— Absences
Future Difficulties

— Incorporation into CPS system
— Kurt leaving for a week
— Time constraint with implementing and testing of module
— Transmission of ideas and goals to future IPRO semesters