IPRO 331

Global Warming and Community Outreach

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Objectives

- Evaluate and incorporate previous presentation feedback into new methods of addressing the scientific aspect of global warming. This primarily includes subdividing the issue into four major aspects that contribute to this effect.
- Present material to a larger and more diverse audiences, including schools, community centers, libraries, non-profit organizations, and other possibilities.
- Focus on solid, scientific data from credible sources that define why and how global warming is occurring, rather than discussing the politics and economics that surround the issue.
- Create a platform for this IPRO to continue in the future, using resources and feedback received from the current semester.
- Utilize previous presentation data to inform and educate the public about the cause, impact, and solutions of global warming from four different perspectives (subgroups).
- Edit and improve former presentation(s)
    - Focus on delivering information regarding global warming research and analysis
    - Streamlining presentations to exclude irrelevant and unnecessary data.
    - Creating different presentations more suited for different groups.
- Present to divers audiences including, but not limited to, schools, community centers, libraries, and non-profit organizations and create a master list of contacts.
- Conduct studies to collect information and feedback for improvement of current and future presentations.
- Standardize and simplify presentations to facilitate transitions for future use.

Background

- People began to start researching the possibility of global warming in the early 1900's. German scientist Guy Stewart Callendar was the first to compile international temperature recordings from other scientists to conclusively state that the Earth's temperature had indeed risen between 1890 and 1935 by as much as half a degree Celsius. He was also the first to propose the idea that carbon dioxide emission by the burning of fossil fuels leads to the greenhouse effect. The U. S. Weather Bureau's Division of Climate and Crop Weather confirmed his findings that the temperature had indeed warmed. . This paved the way for future climate research.

- The Intergovernmental Panel on Climate Change (IPCC) was first established in 1988. In 1990, they released their first report concluding that the Earth's temperature had risen, however discrepancies remained as to weather this was a natural process or if industry was to blame. The IPCC's latest report, released in 2007, conclusively states that serious effects of global warming have become evident.

- Al Gore brought the issue of global warming to the forefront of American homes with his Academy Award-winning documentary "An Inconvenient Truth", released in 2006. Leonardo Dicaprio also released his documentary on the state of the natural environment, "The 11th Hour", in 2007.

- IIT Professors Michael Gosz and Peter Lykos developed a Microsoft PowerPoint presentation that they delivered in Western Springs on February 4, 2007. This lecture focused on the actual scientific findings behind the proclaimed numbers attached to the media and news coverage of

global warming. It also focused on the multiple chemical components causing Earth's temperature to rise significantly. The presentation was non-political, setting up the basis for IPRO 331. Local people are interested in global warming and want to know about the hard facts, not information they hear about that may be biased. This is why the outreach was developed.

- IPRO 331, Global Warming and Community Outreach, began in the fall of 2007, advised by Professor Lykos with the help of Carol DeBiak, from Galvin Library. During this term, the IPRO group successfully compiled a 50 minute presentation covering a vast majority of the scientific analysis of global warming. They presented in teams of two people each at De La Salle High School at the end of the semester, giving students a pre- and post-test to determine the effectiveness of the lecture and collect feedback. The main comment was that the presentation felt rushed and over-loaded with information, due to the many topics it covered.

- In Spring 2008 students broke down the topic of global warming into four main topics: the polar ice regions, bio-fuels, carbon dioxide emissions, and solar energy. Each group then had its own presentation. They continued to present their global warming information to community organizations that were interested in the subject.

Methodology/Work Breakdown Structure

- *Definition*

The main goal of the fall semester of IPRO 331 is to build off the previous two IPROs in terms of scientific and global data while further enhancing the knowledge of the general public throughout Chicago and the greater Chicago area. The team plans on utilizing the past data (which is presented on iGroups) and creating a more streamlined presentation that covers all of the main topics while enabling the group to add more relevant and interesting information. It is the group's philosophy that there is no reason to re-do what past groups have done in terms of research when it is already made available. This will allow the group to focus more heavily on the main goal of community outreach. In terms of the community outreach, it is still the same goal as the previous IPROs to reach as many possible candidates as the semester allows. Another one of the group's philosophies is that reaching as many people as possible is the key to making this semester's IPRO successful.

- *Execution*

The first objective is to take the past semester's presentations and cut out extraneous data and make the presentation more palatable. Also, the addition of new, relevant data will make the presentations up to date. As of right now, the four previous sub-groups will be divided up in order to make the project easier to manage. Each group will analyze their specific group's presentation and determine what stays and what goes. Then, a new presentation will be created, using some of the old quality data while adding more information that benefits the new presentation.

Once the presentation is completed, specific groups must be contacted in order to actually present the presentation. As opposed to the last group's trial and error approach, our group has the distinct advantage of having connections to outside communities. Many of the members already have

possible dates for the IPRO to present. This allows the group to tailor the presentations to meet the age and skill level of the audience. Also, there is a list of other possible organizations that the other group members who have no connections can contact. We plan on doing our presentations from October 1st- November 20th.

Once the presentations have been scheduled, two members (or more) will be responsible for learning the specific presentation that is developed for that specific audience. This presentation team will be determined by the schedule of the individual members. The presentations will be tailored to each group, i.e. hands-on projects for elementary/high schools and data oriented presentations for adults and specific interest groups. The main presentation will not change in terms of the information given towards global warming and human impact. Each member has uploaded his/her personal schedule to iGroups as this will allow the group to easily determine who will be able to give the presentation. A log of the possible contacts that each member has talked to will be uploaded to iGroups in order for people to see just how many organizations have been contacted over the course of the semester. Also, any possible new contacts will be brought up at team meetings and discussed as to whether or not it is an intriguing possibility.

- *Analysis of Results*

In order to determine whether or not the presentations were successful, we will be utilizing a pre- and post- test. The IIT chapter of the IRB will be involved in order to determine whether or not our conduct is responsible in terms of data acquisition. Overall, the group will try to determine whether or not the audience learned anything new about global warming and if they are more interested in learning how to combat the problem. All analysis will be uploaded to the iGroups website for future IPRO use.

- *Deliverables*

Throughout the semester the required deliverables will be handled by small groups of two to three students of which will then be presented to the whole group for analysis. Once a final draft is created and approved, the deliverable will be turned in to the IPRO office by the due date.

Expected Results

It is a general consensus within the group that the main thing to take away from this semester's IPRO is to reach the community and inform them of what is taking place here on Earth in terms of global warming. The previous two IPRO's have done a great job collecting and sorting through the data, and it is the current group's job to take the data and improve upon it while focusing heavily on the community outreach. Another expected result is to make the audience as a whole more interested in the topic of global warming and have them become more involved in the further discussion of this crisis.

In terms of the members of the IPRO, it is an expected result that at the end of the semester each member has become a more fluent public speaker and a greater understanding of the topic of global warming and how it applies to everyone. Once the group has become experts on the topic, hopefully this knowledge can be passed on to the audience and they can go away more educated and inform more people of what they heard. A more educated public on the topic of global warming will allow them to encourage lawmakers and other public figures to take note of this global problem. The most dangerous thing for a democracy is having an uninformed public, and this IPRO's job will be to change that.

Budget

- $100 for transportation. This will cover gas and parking expenses.

- $150 for printing of color brochures, surveys/questionnaires.

- $100 for snacks or miscellaneous spending. If people are going to come watch us we might want to bring cookies or chips etc. This would also cover any spending we have not yet thought of that we may need.

Schedule of Tasks and Milestone Events

- September 19th- Project Plan due
- October 6th-11th – Midterm Reviews
- November 26th – Exhibit/Poster/Abstract/Brochures due
- December 3rd – Presentation Uploads due
- December 4th – Final Report due
- December 5th – IPRO Day/CDs due
- Due to the nature of our IPRO, most of our presentations given to the public will be on a first come, first serve basis, and this will mean that presentation dates will not be known until around a week ahead of time. The community presentations will be documented in the final presentation on IPRO day. We plan on doing presentations from October 1st-November 20th.

Designation of Roles

Subgroups

1. Carbon Dioxide (Nim, Melissa)
2. Polar Regions (Satchell, Sara)
3. Solar Energy/ Wind Energy (Mark, Jonathan)
4. Biofuels (Marc, Ashley)

Presenters

Content Managers

Designers

Developers

Team Leader -- Johnathan

Schedule -- Ashley

Minutes -- Melissa

Deliverables

Project Plan—Marc, Mark, and Sara

Midterm Presentation

Ethics Statement

Exhibit and Poster

Abstract/Brochure

Presentation

Final Report