



IPRO 330

**Creating a Science
Fair Archive for
Chicago Public High
School Students**



Introduction

- **Presenters:**

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Problem

- American math students rank in the bottom 20% internationally
- Urban 8th graders perform worse on science standardized tests



Our Purpose

- Increase quality of math and science education in Chicago Public Schools (CPS)
- Instill a love of math and science in CPS students
- Help students and teachers execute science fairs well



Research

- Judged CPS science fairs
 - Discussions with students
 - Study good and bad projects
- CPS teachers/administrators
 - Chris Dignam, Kevin Hall,
Eric Williams, Tammy Butler



Objectives

- **Develop a science fair archive**
 - Science fair project bank
 - Data analysis/presentation guides
 - Links to useful sites, resources
- **Broader impacts**
 - Define “math-centric” project
 - Guides used beyond science fair



Project Plan

- Team divisions
 - Projects, Guides, Website
 - Parallel Organization
- Weekly meetings/updates
- Bi-Weekly quotas on development
- Monthly meetings with CPS



Deliverables

- Project bank & links
- Data analysis guides
- Presentation skills guides
- Website (access for CPS)



Communication

- Teams meet/report on iGroups
- Google Docs for joint files
- Team familiarity prior to IPRO



Difficulties

- Loss of advisor
- “Math-centric” definition
- Ethical issues
 - *Allowable* project materials
 - Questionable project topics



Team Results

- Broad spectrum of projects
- Useful guides
 - Statistics
 - Paper writing
 - Display
 - Verbal presentation
- Website updated frequently



Future Work

- Feedback from CPS students
- More projects and links
- Rating system to judge projects
- Online forum for discussion



Questions?