IPRO 330

Science Fair Extravaganza http://sciencefair.math.iit.edu

Grant Proposal

- •A desire for something more substantial lead to the decision to apply for grants in order to build a Science and Math learning Center (SMLC) that helps students with STEM
- The NSF MSP (Math and Science Partnership) grant was applied for

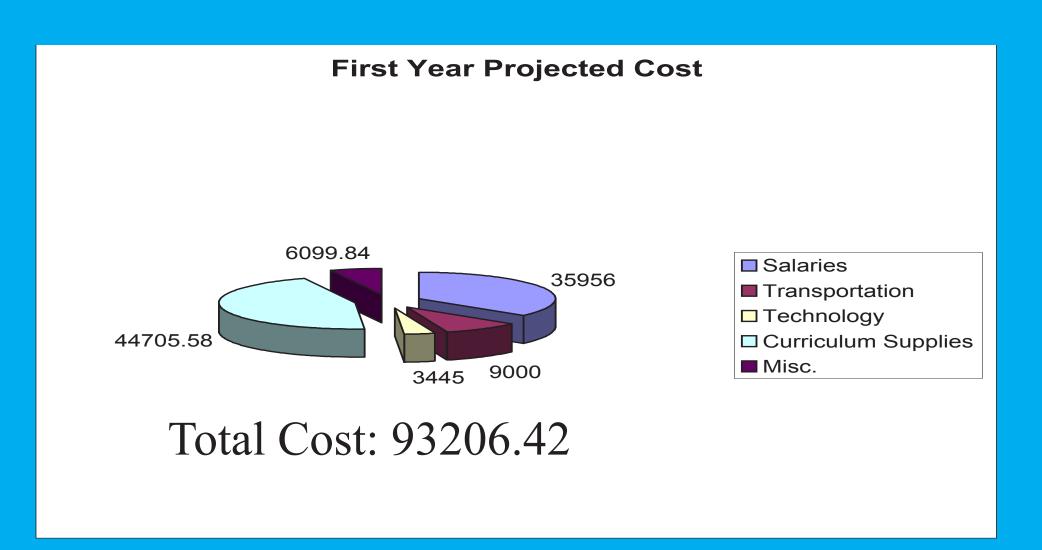
Vision Statement

- •An on campus lab would be constructed for middle to high school students.
- •The students would be assisted in the fields of math and science so they can be successful in their science fair projects. They would learn how to make a successful project through proper procedures, data analysis, data interpretation, oral and visual presentation skills, via instruction from IIT student tutors.
- •A curriculum consisting of technology-dependent math and science problems will be implemented

Data and Demographics

The data and demographics we used for the grant are summarized in the following charts.

Columbia Explorers Academy		
Avg class size	31	
Math teaching time	28	
Science Teaching Time	54min	
Math teaching time Science Teaching Time % Classes not taught by Low Income %	40min	
Low Income %	98	
Limited English Prof. %	41.2	
ISAT Math Exceeding% 8th grade	24	
ISAT Math Exceeding% 8th grade ISAT Science Exceeding% 7th grade	3.4	



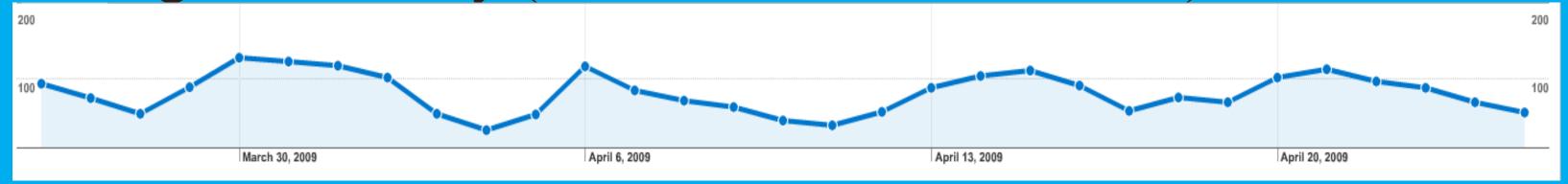
Contacts

•Numerous contacts were made in order to both gain support for our SMLC, and to get advice about how to go about organizing, funding, and finding space for it.

Name	Organization	Position
Angela Dumas	CPS	Citywide Science Fair Coordinator
Leroy Kennedy	IIT	VP, Community Affairs and Outreach Director, Interprofessional Studies
Thomas Jacobius	IIT	Director, Interprofessional Studies
Gupreet Juneja David Baker	CPS	High school Teacher - Richard High school Vice President of External Affairs
David Baker	IIT	Vice President of External Affairs
Andrea Lee	GBF	Education Organizer
Jose Barrera Sr.	CPS: CEA	Principal
Gerald Doyle	IIT	Vice Provost
Judith Lederman	IIT-MSED	Director of Teacher Education
Jason Smith	IIT Inst. Adv.	Director, Annual Giving

Website Finalization

- •It was determined that the website was near completion.
- •Usability testing would finish the current design cycle
- A finished product was determined necessary for grant proposal
- •Average 92 hits/day (still almost 100% increase) from fall



- •Included a legal disclaimer
- •Made it compatible with future browser versions
- •Fixed conceptual inaccuracies in projects, other small changes

Usability Testing

- •Usability testing is where one tests a web design by choosing a sample from its target audience and then having them complete a series of tasks that simulates someone using the web site. From the observations made, changes are then implemented in order to make the site more usable for its target demographic.
- •Meeting with Leroy Kennedy and David Baker, usability testing of the web site was discussed
- •Since the web site was almost complete, usability testing was determined to be the correct part of the design cycle to focus on this semester
- •This led us to put aside the idea generator idea discussed in this and previous semesters
- •Met with the Usability Testing Center in order to learn how to design and implement the usability test properly
- After several members received NIH (National Institute of Health) certification and the UTEC (Usability Testing & Evaluation Center) approved of our test we had to gain IRB (Institutional Review Board) approval.
- •After IRB approval we then got both CPS and the school's approval to conduct the usability test with a sample of eight students. Usability Testing & Evaluation Center