Project #1: Current Events Science/Adult's Programming

Project Description: The Museum of Science and Industry does not offer much in the way of Current Events Science or Adult Programming. For example, some museums have an exhibit area dedicated to presenting Current Science News to the public that they update routinely. Others offer weekly podcasts about Current Science News that visitors can download if they visit the museum website. Furthermore, some Museums have educational programming for adults. For example, the Dana Centre at the Science Museum in London hosts 2-3 weekly 'seminars' where experts from the field will lead discussions on controversial Science Topics.

Evaluation Needs:

- What's the best way to present Current Science to the Public?
- How frequently would a Current Science exhibit be updated?
- Should lectures/seminars stem from current exhibits in the museum, or is any topic fair game in the science universe?
- What demographic does 'lecture/discussion style' educational programming appeal to most?
- Do our visitors desire such additional programming?

Interns should do some research on what/how other museums handle such programming and try to create a survey that would help the Museum of Science and Industry understand where visitor interest may lie in these areas.

Museum Contact: Phil Keck, 773.753.1378, phillipkeck@msichicago.org

Project #2: See Your Own DNA demonstration

Project Description: The current See Your Own DNA demonstration is delivered daily in our *Genetics: Decoding Life* exhibit. The demonstration involves extracting a visitor's DNA and explaining that all living things have DNA, and that DNA is found inside the nucleus in a cell. When appropriate, demonstrators will answer guest questions after See Your Own DNA to further provide a personal connection to genetics and make the content more accessible. The extraction procedure is available on our website in aims to continue the visitor experience beyond the Museum's walls.

Goals of Project: The goals of demonstrations at the Museum include adding a fun, personal interaction to the guest experience as well as conveying basic science content.

Evaluation Needs: This demo is a few years old. We would like to create new demonstrations (in addition to See Your Own DNA) under the broad topic of genetics to be delivered from the existing demonstration space in the Genetics exhibit. We need to know what our audience knows, does not know, and wants to know about genetics. It might also be helpful to know some common misconceptions about genetics that we can attempt to dispel in a demo.

Project #3: U-505 Online Interactives

http://www.msichicago.org/exhibit/U505/onlineactivities/index.html

Project Description: In order to maintain the education department's goal of engaging various audiences and communities in the Museum's programming, we developed an interactive online component to the *U-505 Submarine* exhibition.

Goals of Project: After interacting with two games, "Find the U-505" and "Command the U-505", visitors will be able to discuss the perspectives of both the Germans and the Americans in the fight to capture the U-505.

Evaluation Needs: To determine the usability and functionality of the U-505 online interactive games

Museum Contact: Kate Murray, 773-753-6260, kate.murray@msichicago.org

Project #4: Petrochemicals, Polymers, and You! demonstration

Project Description: The current Petrochemicals, Polymers, and You! demonstration is linked to the *Petroleum Planet* exhibit and delivered daily in our Rotunda from a mobile cart. The demonstration gives a basic introduction to polymers and explains how polymers are part of our everyday lives. The procedure is available to our visitors and handed out after the demonstration.

Goals of Project: The goals of demonstrations at the Museum include adding a fun, personal interaction to the guest experience as well as conveying basic science content.

Evaluation Needs: This demo is a few years old. We would like to create new demonstrations (in addition to Petrochemicals, Polymers, and You!) under the broad topics of petrochemicals and polymer science to be delivered from the mobile demonstration cart. We need to know what our audience knows, does not know, and wants to know about petrochemicals and polymer science.

Project #5: Demonstration Program Development

Project Description: The demonstration program currently consists of 8 demonstrations delivered from mobile demonstration carts, a demonstration counter, and a mobile demonstration stage. The topics include: magnetism, DNA, polymers, materials science, robots, electromagnetic spectrum, and static electricity. We are currently developing 2 new demonstrations on seasonal science and sound, and the demonstration program at the Museum will be expanding in the near future. Experiences and presentation style depend on venue and range from interactive and hands-on experiences at our mobile demonstration carts to presentation-style demonstrations on our mobile stage.

Goals of Project: Regardless of the degree of interaction and hands-on experiences, our goals are: to spark interest in science and the content we are presenting, to enliven the Museum floor by creating fun, personal interactions for visitors, and to convey basic science content. Our demonstrations should present science in a way that makes science more accessible to the general public.

Evaluation Needs: In order to best serve our audience's needs and create new floor programming to enliven the Museum floor, we need to know what our audience needs and wants from floor programming. Specific questions we have include:

- Which science topics are guests most interested in learning about?
- Which science topics do guests have the most misconceptions and/or misinformation about?
- Which demonstration styles (e.g. informational, interactive, theatrical) and venues work best (e.g. theater, stage, mobile cart) at conveying basic science content and are most enjoyed by our visitors?

Museum Contact: Shannon Forsythe, 773-753-2760, shannon.forsythe@msichicago.org

Project #6: Exhibit Evaluation – Idea Factory

Choose and evaluate an exhibit component from the Idea Factory area.

Exhibit Description: As the centerpiece of the Museum's Imagination Station, The Idea Factory is a learning-through-play exhibit that gives young children the opportunity to explore scientific principles through interactive activities. Using four basic objects - a cube, sphere, tetrahedron and cylinder - children experiment and test their own theories about the fundamentals of construction, simple machines, light, color, magnetism, balance, air and water. In the Water Spectacle children can build and navigate their own boats to learn how water moves objects. With Construction Crane, children utilize handeye coordination skills to retrieve and move objects through the use of an electromagnetic crane.

Project #7: Exhibit Evaluation – Reusable City

Choose and evaluate an exhibit component from the Reusable City area.

Exhibit Description: In this exhibit, you take a trip through a city neighborhood and experience air pollution, recycling, contamination and drinking water safety through exciting, hands-on interactives. In our "Reusable City", the environment is not someplace else where everything is green and beautiful. The environment is right here in your neighborhood and you must do something to preserve it. Spanning over 4,000 square feet of space on the Museum's balcony level, "Reusable City" features an ozone monitoring station where you can take live readings of ozone levels and compare them to past readings. You can press the accelerator of a car to test its emissions and find out how catalytic converters help clean the air. There's a water treatment station where you can trace water from the lake to the tap, and find out the behind-the-scenes story on drinking water, or take a "taste test" at the water bar and decide if you prefer plain water or water with additives.