

Date: July 3, 2007

To:

From: *Evaluation & Planning Team*

Re: Evaluation Overview

---

The Evaluation Team at the Museum of Science and Industry is committed to using visitor studies research and evaluation to inform program and exhibit development and to better understand the needs, expectations and interests of current and potential Museum audiences. As a critical component of the Museum's success, the Evaluation Team consults research in various fields and employs data collection methods (i.e. observations, surveys, interviews, focus groups etc.) to conduct informed studies that ensure that all points of view are considered. Through this, measures of success for the exhibit or program can be established, refined and accomplished.

Evaluators can assist exhibit and program teams in setting achievable and measurable goals and gathering data from all relevant constituencies, which may include general visitors, family groups, students, parents, caregivers, children, teachers, school administrators and Museum staff. Both quantitative and qualitative methods are used to build a detailed understanding of stakeholder experiences, and to determine program and exhibit possibilities, issues, successes and improvement areas. The resulting information can be used to guide the conception, development and progress of each program, exhibit or interactive.

The following types of studies are conducted by the Museum's Evaluation Team:

1) ***Front-End***

- Seeks to understand how our visitors think about, react to, and understand ideas that will be displayed in an exhibit or program. The goal is to find the common ground between the visitors and the exhibit or program.
- Tests basic ideas during the initial planning stages of an exhibit or program and their relevance to the visitor. Visitors' familiarity with, preconceptions, misconceptions and understandings of themes are often examined.
- Asks questions like: How much do visitors know about the subject matter? What do visitors imagine they will learn, see and experience in the exhibit or program? What would they want to see? How do they see this topic relating to their lives?

2) ***Formative***

- Assesses activities as they are created, provides information to improve the project or exhibit, and ensures the exhibit/program components are on track to achieve their intended results.
- Uses mock-ups/prototypes to test components during the design stages of a program or exhibit.

1. **Initial prototyping** – Used to test initial conceptual and content ideas, provides ideas/directions for developers to explore in future prototype versions, usually conducted with a medium representative sample of visitors (n = ~25).
  2. **Technical prototyping** – Used to uncover any functionality or user-related issues with prototype, usually conducted with a smaller representative sample of visitors (n= ~ 10).
  3. **Prototype testing**- More of a summative testing, major changes will not be made to the prototype, investigates user satisfaction and effectiveness of prototype in meeting goals and objectives, usually conducted with a larger representative sample of visitors (n= ~ 50).
- Asks questions like: Are the instructions clear? What is the exhibit about? Are the labels understandable? What are visitors taking away from the program? What could be improved?

### 3) **Remedial**

- Determines the program's/exhibit's initial successes and shortcomings and makes suggestions for changes based on visitors' experiences and behaviors.
- Collects data after an initial version of the program is completed or an exhibit is installed.
- Asks questions like: Do visitors operate the interactives properly? Are visitors able to read the labels? Are they navigating the space as intended? Which parts of the exhibit or program are confusing? What could be changed or improved to make for a better experience?

### 4) **Summative**

- Measures the overall effectiveness of an exhibit/program as well as the overall effectiveness of its individual components.
- Collects data at the end of a program or after the installation of an exhibit is finalized (i.e. after remedial evaluation changes have been made and the exhibit/program is considered complete).
- Asks questions like: What meaning do visitors create from their experiences? What do visitors learn? Which components hold visitors' attention? How long do visitors stay in the exhibit? What has the institution learned from this project?