Objectives
- Identify, select, and catalog existing digitized assets from the museum’s 650 interactive exhibits
- Establish digital library interoperability mechanisms to enable the widest dissemination of item-level metadata to NSDL portals (including the central main portal)
- Create guidelines for cataloging digital exhibit-based science resources in established metadata element set standards that capture the unique museum quality and pedagogical value of Exploratorium digital assets
- Evaluate and refine the usability, accessibility, and applicability of the digital library and digital exhibit-based resource for educators, teacher educators, and lifelong learners

- Conduct field studies
- Define user requirements for digital library
- Build Exploratorium Online digital library
- Conduct formal study, final evaluate, and refine
- Define interoperability with NSDL

Teacher Defined User Requirements
- Titles must be clear and descriptive to match a digital resource
- Educators prefer to “Sort by” grade level and standards but do not search for those terms
- Many educators do not understand or correctly use advanced search options
- Educators desire for resources to represent their individual curricula
- No unified voice regarding the types of resources that are most useful to educators
- Resources developed for K-12 classrooms and educators

Target Audiences
- Educators in formal and informal learning environments (teachers, professional development staff, parents, and outreach staff)
- Peer institutions (museums, science centers, and universities)
- Individuals, lifelong learners

About the Exploratorium
Named after the walls of San Francisco’s Filbert Street Ferry, the Exploratorium is a college of over 650 hands-on, art, and human science exhibits. Co-founded by noted physicist and educator Dr. Frank Oppenheimer in 1969, the museum was designed as a hands-on science outreach center, a place for “people to explore the wonders of science and technology.” The museum is dedicated to providing learning experiences that are educational, engaging, and aligned with major science education standards. Exploratorium students can design ways to engage students in educational science. The museum was founded in 1969 by noted physicist and educator Dr. Frank Oppenheimer, in honor of his brother, the physicist Dr. Carl D. Anderson. The Exploratorium is dedicated to the memory of Dr. Oppenheimer and opened its doors in February 1969.

www.exploratorium.edu/nsdl

Concurrent Digital Library Design Approach

Major Expectations and Benefits to NSDL
- New collection of exhibit-based informal learning resources for NSDL
- Implementation of a unified search mechanism that conducts distributed searches
- A research-informed model of teacher use of digital library and media consumption patterns
- Guidelines for cataloging digital exhibit-based science resources in established metadata element set standards
- Result from user studies about Exploratorium Online access and use
- Information about a partner museum’s use and how it adapts Exploratorium metadata