

Exploratorium Online

Exhibit-based Science Learning and Teaching Digital Library

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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 resources for educators, teacher educators, and lifelong learners

Teacher Defined User Requirements

Searching

- 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.

Resources

- Educator desires for resources tend to represent their individual curricula.
- No unified voice regarding the types of resources that are most useful to educators.
- Educators with different experience levels have different resource needs.

www.exploratorium.edu/library

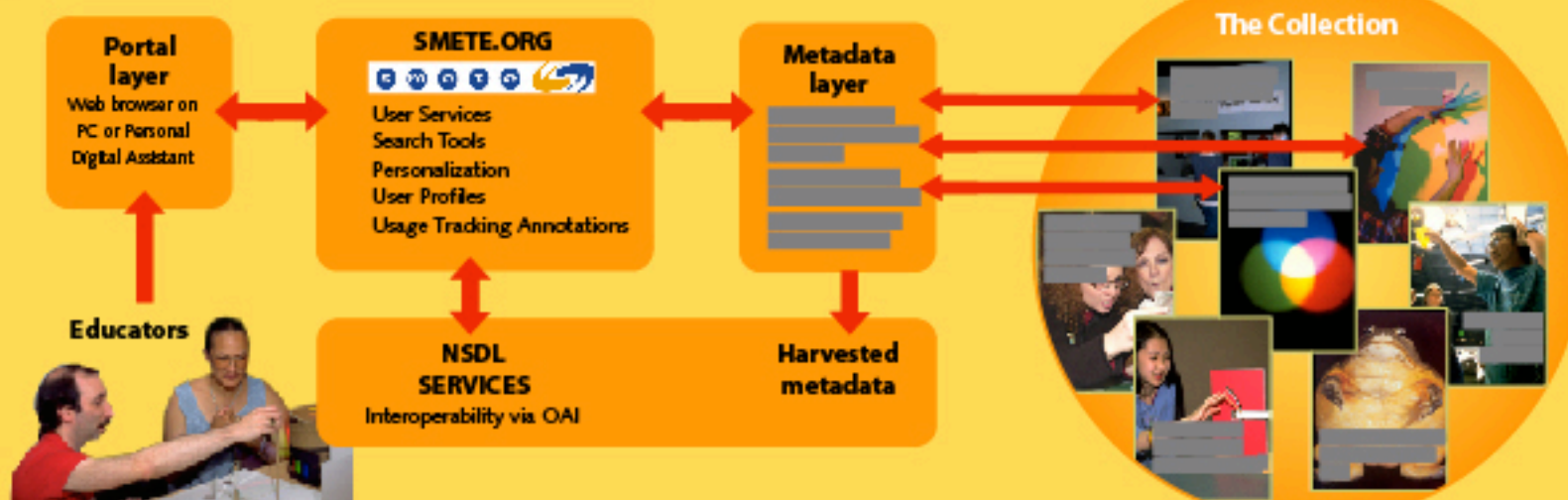
Learning Resources Collection

Resource Type: Video

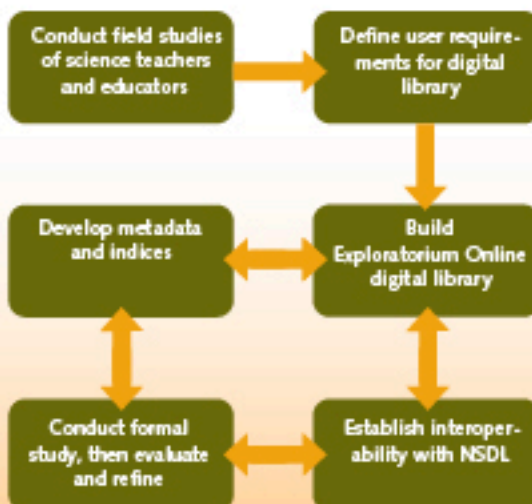
Resource Type: Web Interactive

Resource Type: Article

LIBRARY ARCHITECTURE



Project Approach (2003–2005)



Target Audiences

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

About the Exploratorium

Housed within the walls of San Francisco's Palace of Fine Arts, the Exploratorium is a collage of over 650 science, art, and human perception exhibits. The Exploratorium is a leader in the movement to promote museums as educational centers. This unique museum was founded in 1969 by noted physicist and educator Dr. Frank Oppenheimer.

Major Expectations and Benefits to NSDL

- New collection of exhibit-based informal learning resources and metadata for NSDL
- Guidelines for cataloging digital exhibit-based science resources in established metadata element set standards
- A research-informed model of teacher use of digital library and media consumption patterns
- Implementation of a unified search mechanism that conducts distributed searches
- Results from user studies about Exploratorium Online access and use
- Lessons learned about indexing digital resources to state and national standards