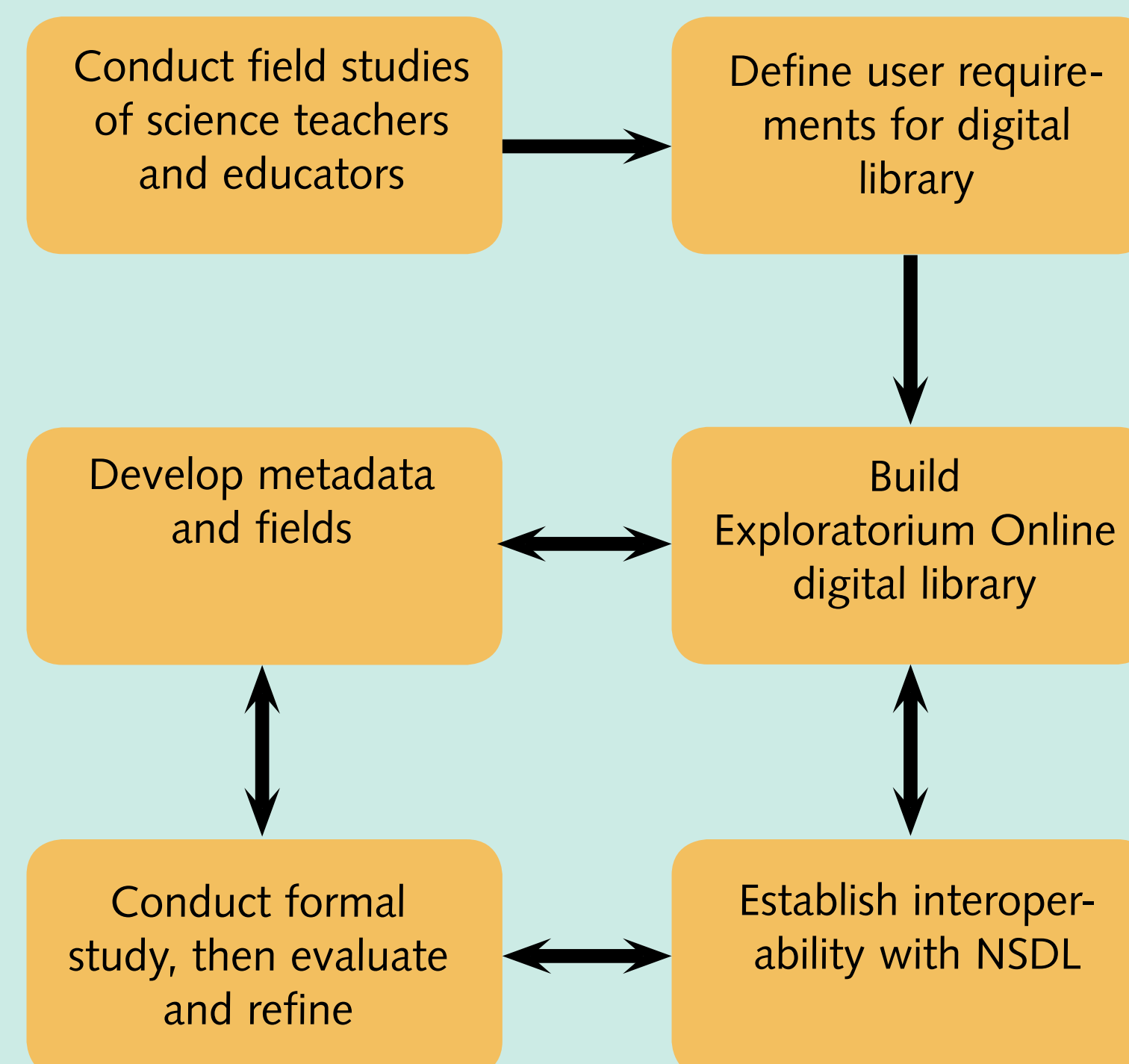


## Objectives

- 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

## Project Approach (2003–2005)



## 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

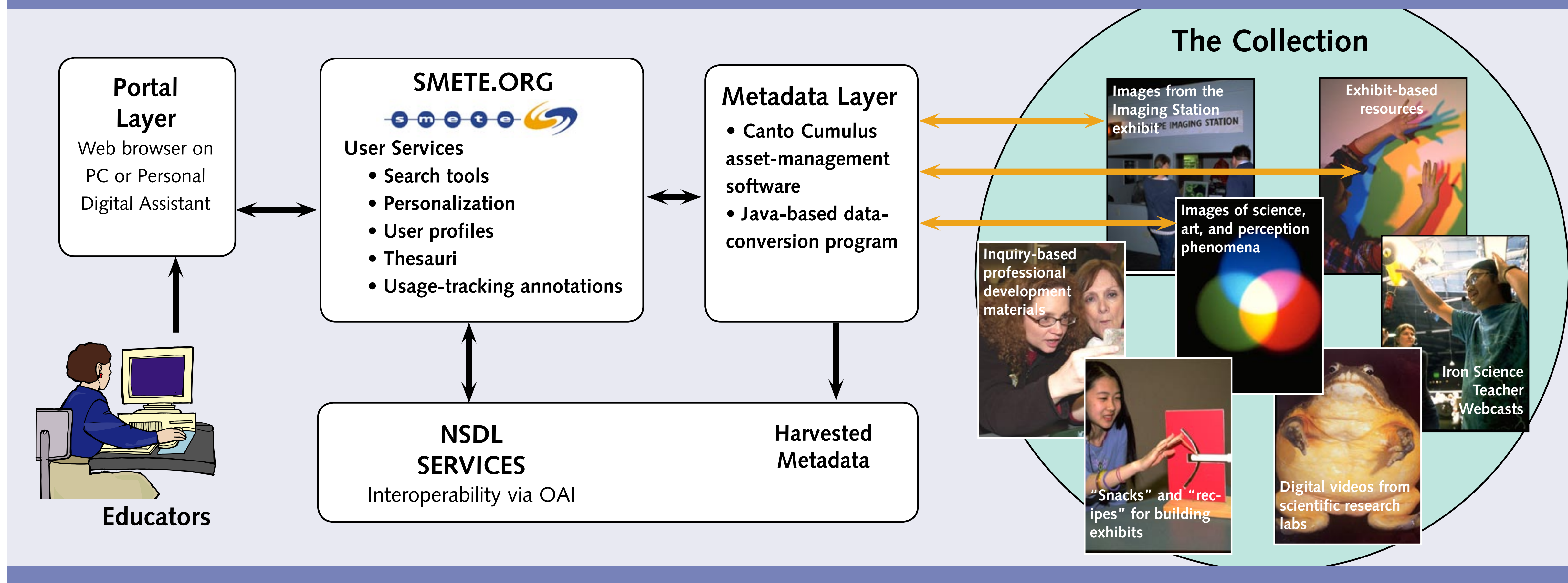
## Target Audiences

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

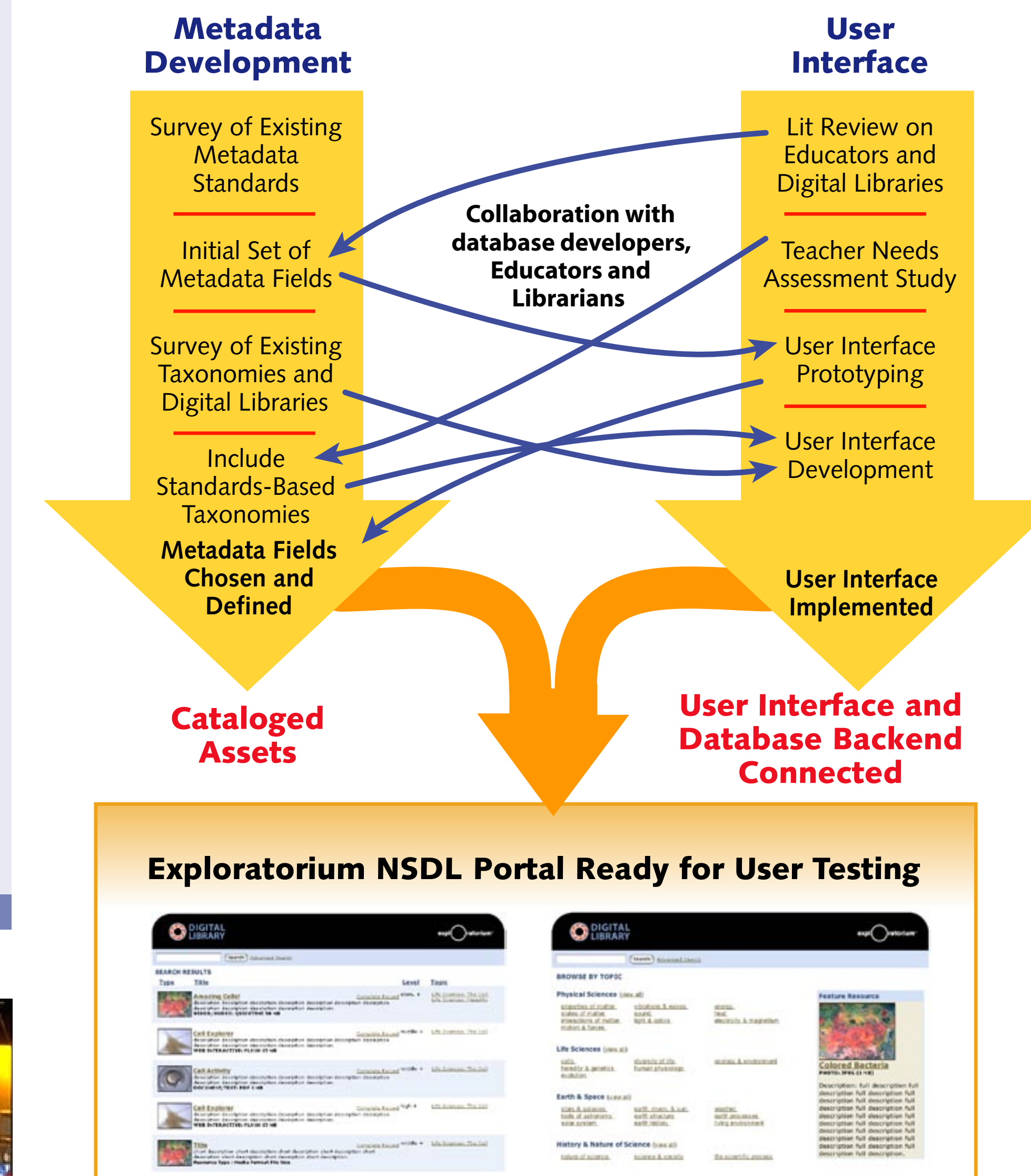
## About the Exploratorium

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, who devoted his efforts to the Exploratorium—and served as its director—until his death in 1985. Dr. Goëry Delacôte, a renowned French scientist, science educator, and public servant, was named executive director of the Exploratorium in February 1991.

## PLANNED ARCHITECTURE



## 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
- Results from user studies about Exploratorium Online access and use
- Information about a partner museum's use and how it adapts Exploratorium metadata