

Intrinsic Motivation in Science Museums: Learning from & Broadening Participation of Visitors with Learning Disabilities | 2005571

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Project page: <https://tinyurl.com/4yz6pt4j>

Project Description

Very little is known about the experiences of people with learning disabilities in informal learning environments. This project investigates how young visitors with learning disabilities experience science museums and seeks to build capacity for the design of inclusive exhibits.

Key Achievements

- **Descriptive study** with youth (ages 10-17; n = 31) with learning disabilities in two museums to gain an initial understanding of experiences of different exhibits.
- **Mixed methods experimental study** to test design strategies (n = 50) (almost complete).
- **Findings:** 1) Exhibit text created various challenges; 2) Audio was seen as beneficial but also socially stigmatizing; 3) Creativity and open-ended exploration were preferred; 4) Accessible challenge was desired to support engagement

Audience & Settings

- **Audience:** Youth/Teen; General Public; Museum/ISE Professionals; People with Disabilities
- **Disciplinary area:** General STEM
- **Learning environment:** Museum and Science Center Exhibits

Access and Inclusion

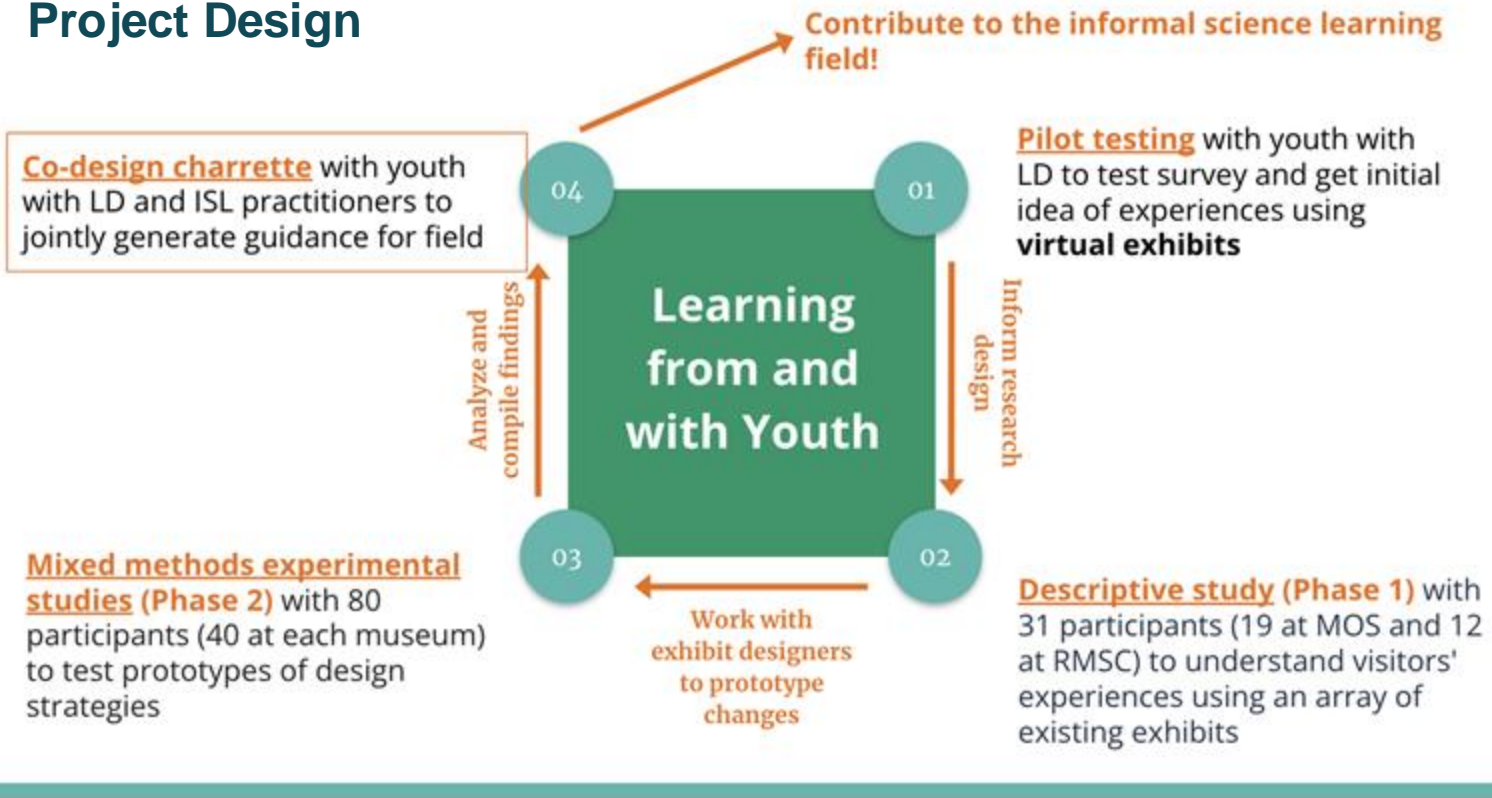
We aim to improve inclusive design to address the experiences of visitors with learning disabilities, the largest population of young people with disabilities in the United States. Resulting design strategies will improve equity not only for visitors with disabilities but others who benefit from similar considerations. Findings broaden accessibility considerations of the field to address complex cognitive needs and strengths, as well as the emotional implications of design choices for accessibility.



This material is based upon work supported by the National Science Foundation under grant 2005571. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

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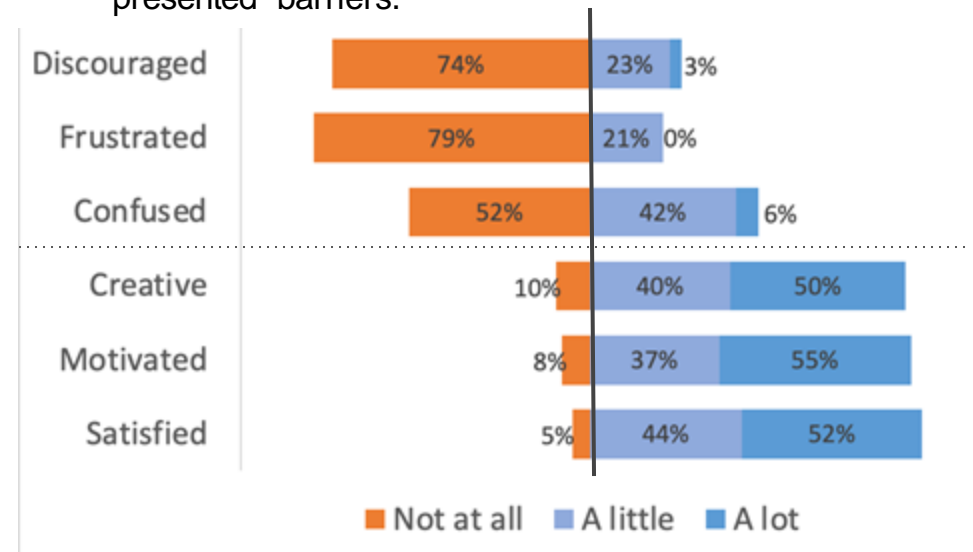
Project Design



Descriptive Study Findings

In the **descriptive study**, as young visitors with LD shared about using six exhibits at two museums:

- Few expressed strong negative emotions, with most not experiencing any discouragement, frustration, or confusion. At least half had strong feelings of being creative, motivated, and satisfied.
- Qualitative responses highlighted design components that presented barriers.

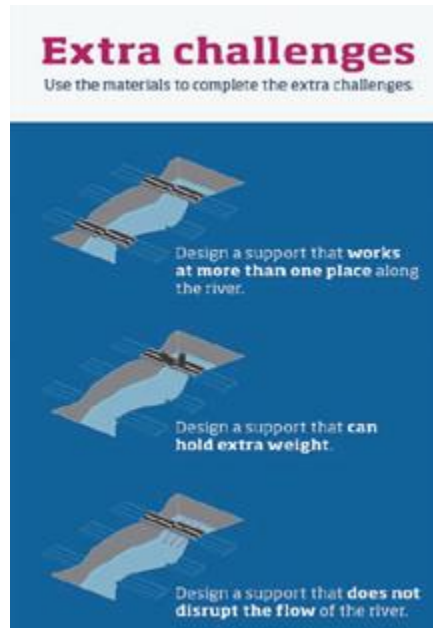


Experimental Study: Examples of design strategies being tested

Optional vocabulary cards



Additional and more engaging challenges



Reduced text and simplified controls

