

INTRODUCTION

Design Thinking has become a well-accepted methodology for developing exhibits and education programs. However, this human-centered approach can be used to ensure that our visitors are welcome in our spaces, that we are meeting their diverse needs, and that our staff is equipped to provide the best possible service.

The **Montshire Museum of Science** (Norwich, VT) engaged in a Design Thinking initiative in 2019 to provide professional development for staff, and to explore ways to better support visitors affected by autism spectrum disorder. Funded by IMLS, this project underscored the value of Design Thinking practices for management of visitor services and museum operations.

GOALS

- Strengthen the capacity of the Montshire's staff to undertake critically important initiatives with innovation, creativity, and openness to change.
- More closely align the Montshire's work with its rural audiences.
- Advance the Montshire's strategic plan.
- Develop innovative approaches to serving visitors affected by Autism Spectrum Disorder (ASD).
- Increase accessibility, enjoyment, and learning outcomes for people affected by ASD.

METHODS

- Full-staff introduction to Design Thinking and ASD.
- Facilitated, interactive, two-day Design Thinking workshop.
- Quarterly check-ins with facilitators.

How did we use Design Thinking principles?

Empathize:

- Pre-workshop interviews with people with ASD and their family members
- Presentations and Q&A with local human service representatives
- Presentation by physician specialist

Define:

- To identify barriers affecting accessibility, enjoyment, or learning outcomes, smaller teams worked together to create challenge statements and define the key problems.

Ideate:

- In three-person teams, brainstormed large quantity of potential solutions.
- Clustered them by theme and narrowed down ideas.

Prototype:

- Built a three-dimensional prototype of a proposed solution and shared with other teams.

Test:

- Initiated this step with a discussion of a testing plan and schedule.
- Solutions will be tested and implemented gradually, in line with budgetary considerations and strategic planning.

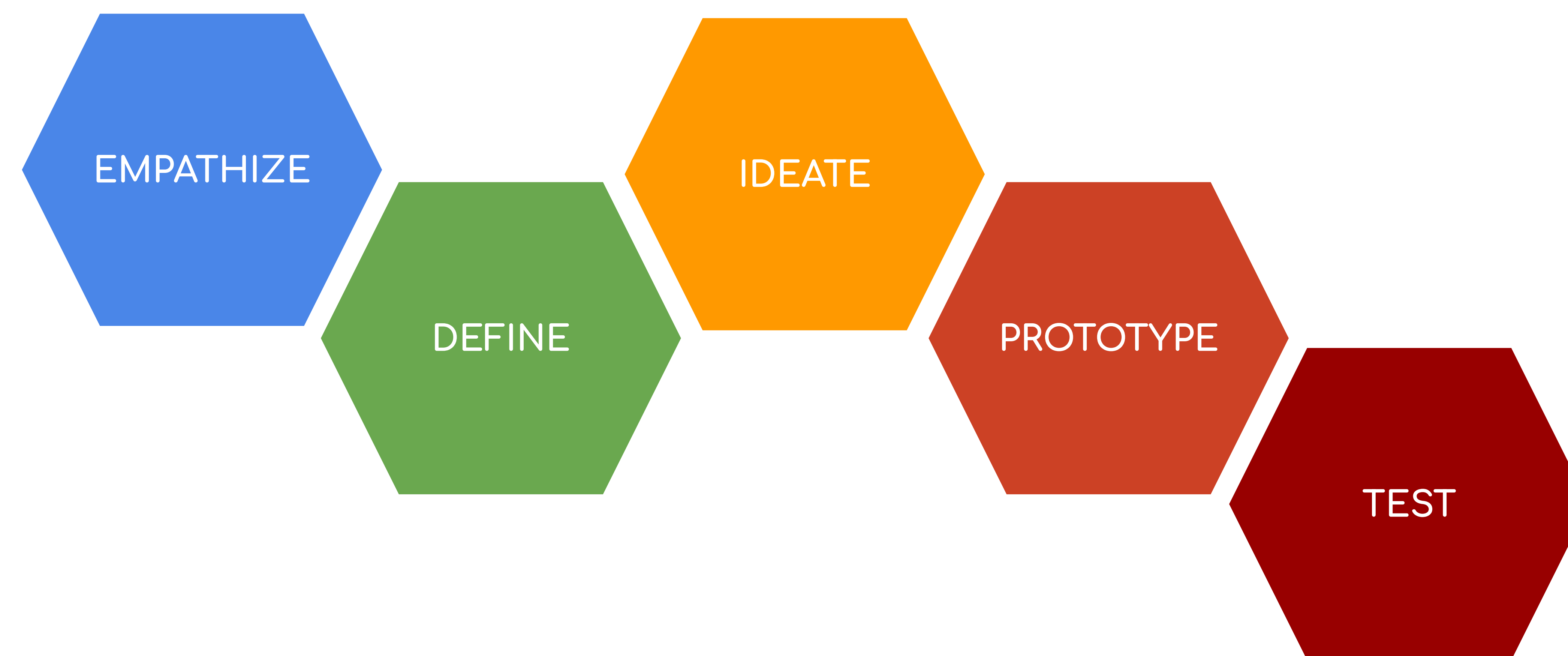
RESULTS TO DATE

- Restroom alteration to accommodate visitors who need privacy or need to control the sound of hand-dryers.
- Provided ongoing free group visits to the Special Needs Support Center, including a respite area.
- Staff book club read "The Reason I Jump" as continued training.
- Developed sensory tool kit for admissions desk.
- Developing accessibility webpage.
- Incorporated the needs of families affected by ASD into space planning, exhibit design, and wayfinding discussions.
- Working to schedule community lecture on ASD.
- Planning *Explainer* training on ASD.



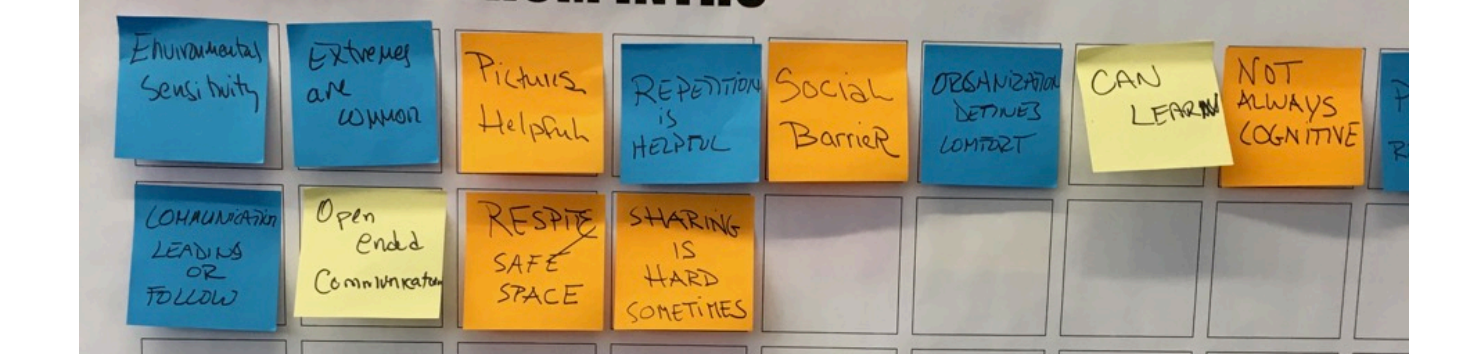
Montshire Museum of Science, Norwich, VT
Design Thinking for Exceptional Visitor Experiences

Design Thinking can help museums improve operations and provide a more welcoming experience for visitors with special needs.



KICK-OFF: EMPATHY/DEFIN

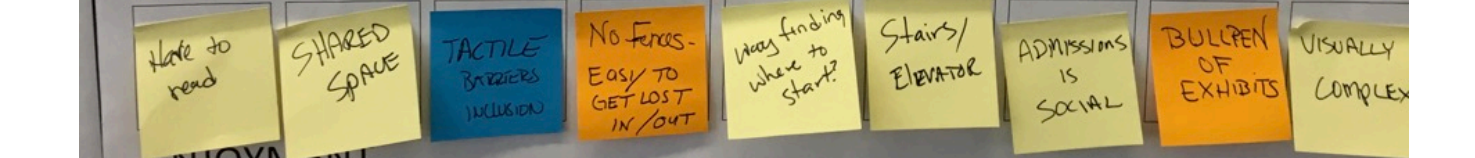
KEY INSIGHTS FROM INTRO



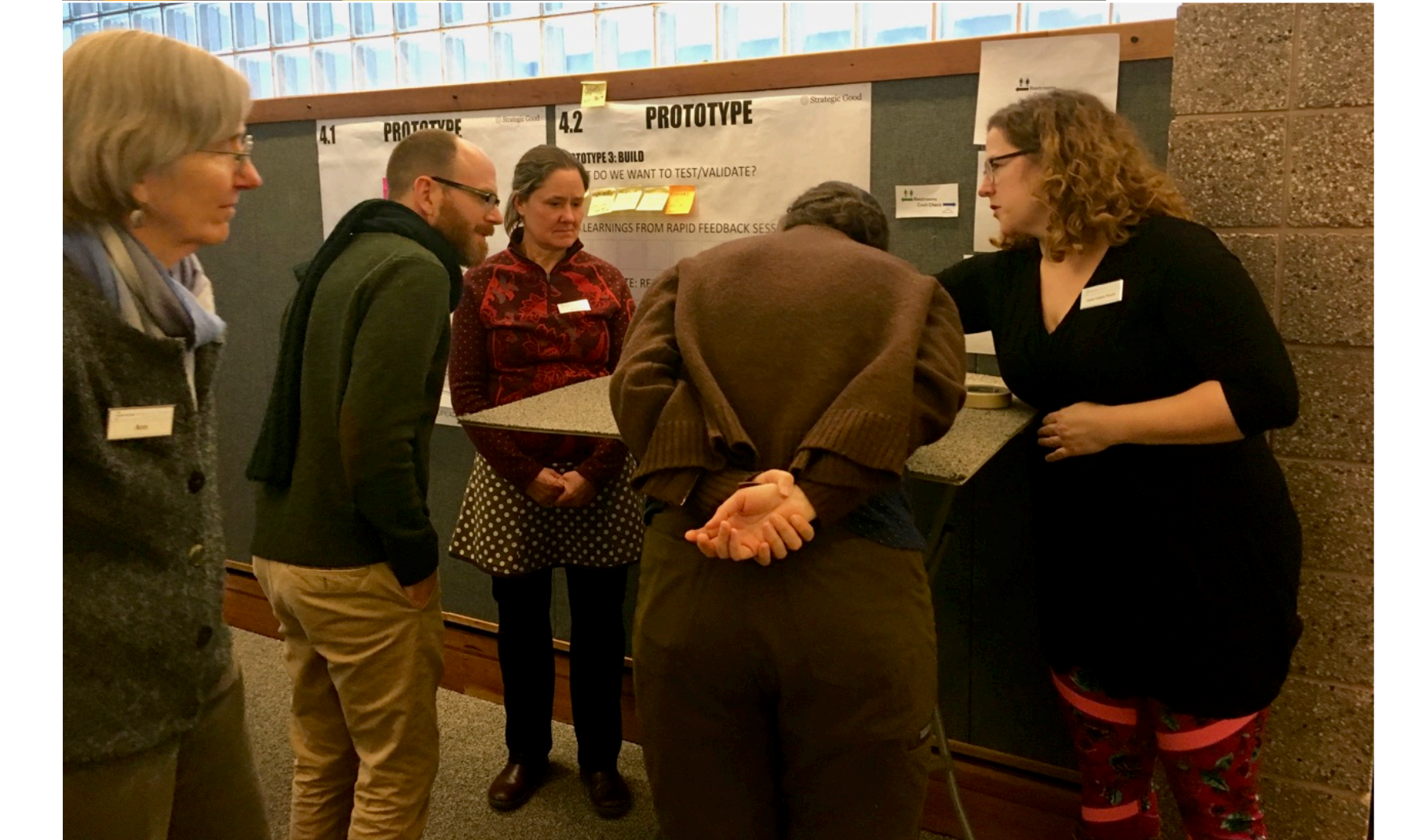
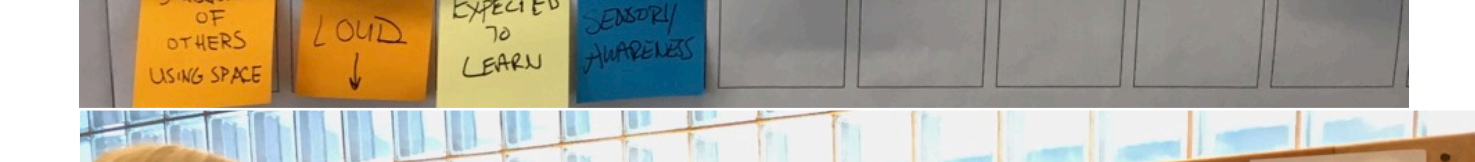
PROJECT OBJECTIVE: TO INCREASE THE MONTSHIRE MUSEUM'S ACCESSIBILITY, ENJOYMENT, AND LEARNING OUTCOMES FOR VISITORS AFFECTED BY

BARRIERS:

ACCESSIBILITY



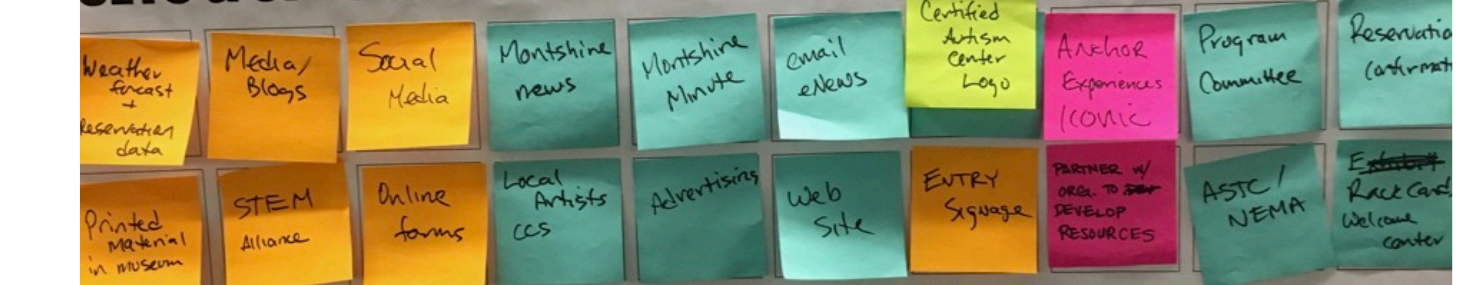
ENJOYMENT



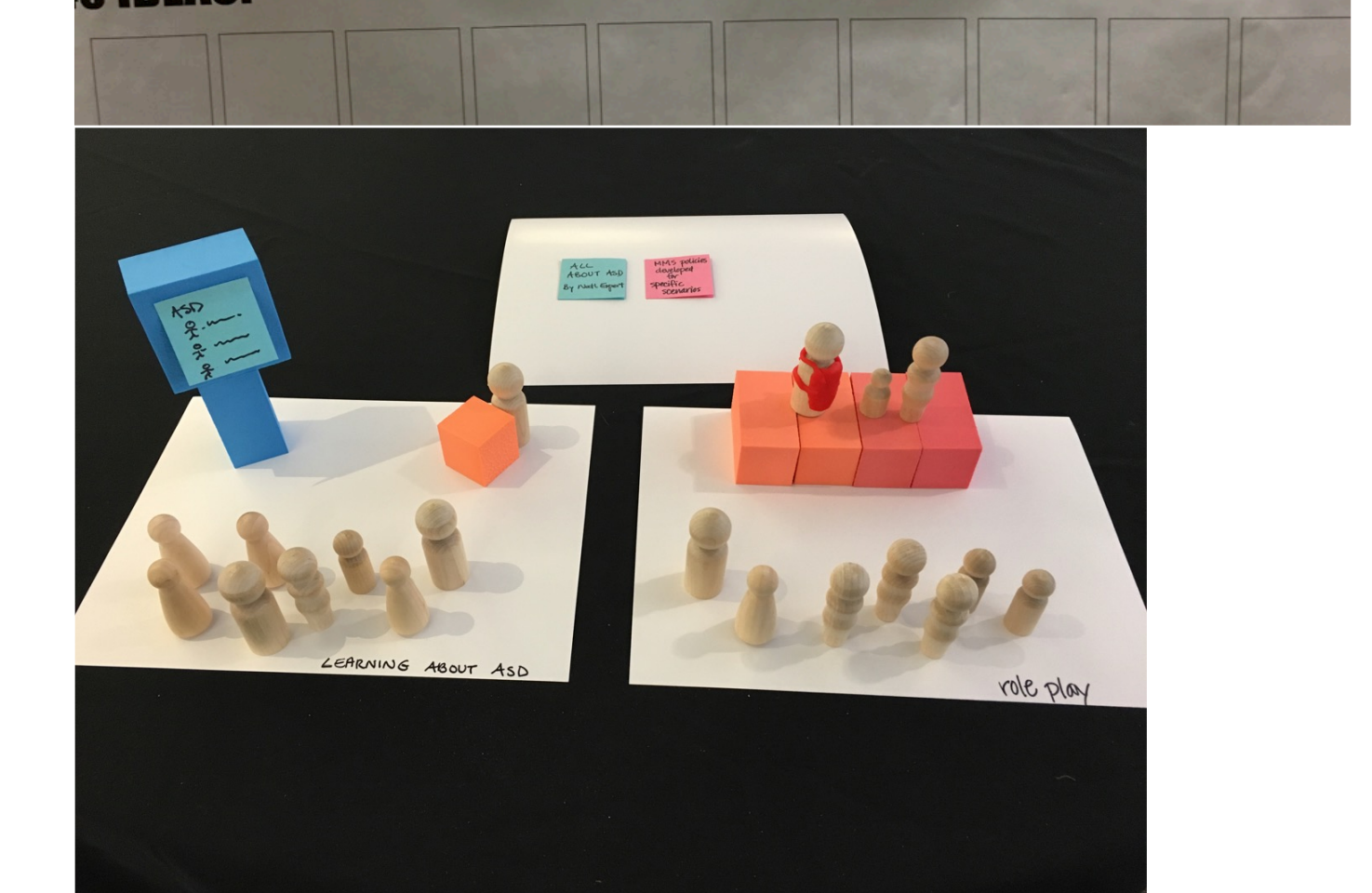
IDEATE

IGN CHALLENGE: How Might we provide pre-visit experiences to ensure visitors affected by ASD have positive experiences at the museum in order to gain enjoyment and reduce stress considering that in-house tests cause anxiety and stress can cause abnormal

SETS & OPPORTUNITIES



10 IDEAS!



PARTICIPANTS

Project Director: Jennifer Rickards, MNPL, Deputy Director, Montshire Museum of Science

Kick-off participants: Full Montshire staff

Workshop participants: Greg DeFrancis, Anne Fayen, Mike Fenzel, Rebecca Haynes, Katie Kalata-Rusch, Aaron Lamperti, Trish Palao, Jennifer Rickards, Marcos Stafne, Sherlock Terry, Amy Vanderkooi, Ann Wickham.

Facilitators: Nick Boedicker and Alessandra Clara, Strategic Good

Community partners: Dartmouth-Hitchcock Health, Dartmouth Autism Lab, Global Campuses, Hartford Autism Regional Program, High Horses Therapeutic Riding, Special Needs Support Center, Spark! Community Center.

Funded by IMLS Museums Empowered

