



# Development of a Sensory Day at a Children’s Museum

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## OVERVIEW OF CAPSTONE SITE

**Overview of Capstone Site:** The Mississippi Children’s Museum (MCM), located in Jackson, Mississippi, provides children’s education via interactive exhibits, activities, and programs focusing on “literacy; health and nutrition; the cultural arts; science, technology, engineering and mathematics (STEM); and Mississippi heritage. MCM is a nonprofit 501 (c)(3) organization.

**Mission:** To create unparalleled experiences to inspire excellence and a lifelong joy of learning.

**Vision:** To inspire Mississippi’s children from all backgrounds to discover and achieve their potential.

## LITERATURE SUMMARY

### Importance of Play: With and Without Special Needs

- Physical, Cognitive, and Social Development
- Problem solving, Creativity, Concentration and Organization
- Catharsis and integration of stressful experiences (Sturgess, 2003)

### Children’s Museums:

- Effective means for children without special needs to learn through play
  - Social Participation
  - Play is seen as an occupation

### Gap in the Literature:

- Limited information on atypically developing children learning through play in a children’s museum environment
- Sensory and Social issues are barriers to participation (Graham et al., 2019)
- Participation looks different for children with special needs (Graham et al., 2019)

## NEEDS ASSESSMENT

Interview with Monique Ealey, Capstone Mentor and Director of Education and Programs

- “My vision is that we will expand our reach and ensure we are inspiring this joy for learning in children from all walks of life and meeting the needs of all children and families.”
- Stated that she has wanted some form of sensory sensitive program at the museum for years

The Capstone Advisor, Peter Giroux, was notified and approved of the project idea.

## PROJECT GOALS / OBJECTIVES






### Sensory Day

- Develop an evidenced-based Sensory Day program
  - Sensory Map
  - Social Stories
  - Sensory Backpack
- Implement Sensory Day at Mississippi Children’s Museum
  - Program had to be delayed due to construction
- Evaluate the effectiveness of the program throughout and make weekly accommodations as needed
  - Evaluation plan and materials created and left for museum use

## PROJECT DEVELOPMENT

### Sensory Map:

- Divides Museum into 5 Galleries (5 total maps)
- Picture and brief description of each exhibit
- Ranks the sensory intensity experienced at each exhibit as low, medium, or high
- Helps parents/caregivers to decide how to explore the museum
- Available for all guests at front desk as well as on MCM website




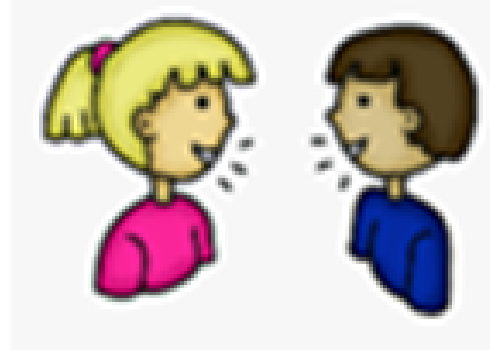

World at Work				
Exhibit	Sight	Sound	Touch	Movement/Balance
 Engineering Energy A great place to work on hand-eye coordination	LOW	MEDIUM	MEDIUM	LOW
 Nissan Race and Roll The Nissan is a great place for social play	LOW	MEDIUM	MEDIUM	LOW
 Construction Rotating the crane is a good way to feel the body moving in space	LOW	LOW	LOW	MEDIUM
 Agriculture Climbing through the barn climber provides great movement and balance feedback	LOW	MEDIUM	MEDIUM	HIGH
 Forestry Experience new textures at the tree rubbing station	MEDIUM	LOW	LOW	MEDIUM

### Social Story:

- Every other page of the Sensory Map is a Social Story
- Teach an appropriate behavior for a social situation
- Increase the child’s understanding of the situation through first person, goal focused narrative and pictures

### Why include Social Stories

- Sensory difficulties act as a barrier to social participation
- This population may have had less social interaction

Social Story: Taking Turns		
 There are many things for me to play with at the museum.	 If another child is playing, I can wait for my turn.	I love to play when it is my turn.
 Other children like to play at the museum too.	 I can ask “May I play after you?”	

### Sensory Backpack: Three Components

- Sound Deadening Headphones
- Sunglasses
- Fidget Toys

### Purpose:

Sensory Backpacks contain tools to lessen the effects of the sensory environment found at MCM. The headphones will help decrease the auditory feedback coming from the noisier exhibits or from other visitors. The sunglasses decrease the effect of exhibits with flashing lights or the sunlight at the outside exhibits. Sensory Backpacks will be available at the front desk on a first-come, first-serve basis.

## PLAN FOR PROJECT EVALUATION

Due to ongoing construction, Sensory Day did not start during the Capstone Experience. An Evaluation Plan (see below) was created but will not be implemented.

This Capstone project is not intended to be generalizable, and the conclusions of this quality improvement project will be used to make programmatic changes for Sensory Day at Mississippi Children’s Museum.

- Quality Improvement project
  - IRB approval not required
- Voluntary Participation
- Identifiable Information masked with Codes
  - P1, P2, etc.

### Instruments:

- Participant Satisfaction Survey
- Staff/Volunteer Survey
  - Qualitative data will be hand coded
  - Codes will be refined into categories
  - Categories into themes
  - Themes into sub-themes

## PROJECT SUMMARY AND FUTURE RECOMMENDATIONS

The sensory system is perhaps the most important factor in how people interact with the world around them, yet it is largely an automatic process and easily overlooked. This means that sensory difficulties can act as major barriers to participation and, therefore, social interaction. The primary goal of Sensory Day is to allow children with these difficulties the opportunity to engage in developmentally appropriate play and social interaction at MCM.

In the future, this program could be adopted by other children’s museums or any organization that wishes to improve accessibility beyond physical barriers.