



WonderTrek

CHILDREN'S MUSEUM

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Advancing WonderTrek's Play Lab: Practices and Processes

December 2024

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Play Lab values play as a powerful strategy for learning and wellbeing. Play is a way for children—and adults—to explore, engage with, and understand their world. Interactive learning is a related process for exploration and learning. Play Lab highlights the role of interaction with objects and materials, with people, ideas, and the physical environment in informal and formal learning setting



GLOSSARY

Play - Freely chosen, personally directed, intrinsically motivated, and an enjoyable way in which children and adults explore and learn, using their bodies, minds, and imaginations. Play does not serve external agendas or goals but is a subjective experience that only the individual decides whether it was successful. A natural learning strategy, children develop their interests, capabilities, and lifelong skills through play.

Interactive Learning - Active engagement with others, objects and materials, and features of the physical environment using the senses, feelings, conversation, and the whole body. It draws on and develops skills and understandings to make meaningful connections. Choices are often determined by adults and may be guided. Interactive learning can be playful.

A Program - A set of multiple, related activities that engage children (and/or adults) in exploring a topic, idea, phenomena, or interest using various, related natural or human-made materials, objects, or tools.

Loose Parts - Open-ended and unscripted materials and objects from varied sources and in ample quantities that provide meaningful opportunities for play, exploration, and messing around.



Framework Context

The organizational and regional context in which Play Lab exists

WonderTrek's Play Lab: Center for Play and Interactive Learning (Play Lab) is a multi-dimensional resource for play, experience development, hands-on learning materials, and workshops that serve museum staff, volunteers, teachers play and program workers, and education leaders, from the early years through middle school as well as children and families from across Region 5.

Play Lab advances the Museum's Vision of:

A more vibrant and connected region because all children enjoy the support of relationships, expanding opportunities, and the wellbeing they need to thrive.

Planning for a children's museum in North Central Minnesota began in late 2015. A group from Region 5 began exploring the potential of a valued regional asset to serve children with families across Cass, Crow Wing, Wadena, Morrison and Todd Counties. In 2018, a planning team worked with museum planners to develop a Museum Strategic Master Plan (MSMP). Along with a Strategic Framework, Exhibit Concepts, and Action Plan, the MSMP included a Learning Framework that consolidated the Museum's beliefs and intentions about play, learning, learners, and the museum's experiences. That Framework is the guiding document for Play Lab.

Inspired by the critical role of play and learning in children's life-long trajectories, Play Lab enhances WonderTrek's dynamic material-rich environments, exhibits, events, and programs by exploring and deepening its understanding of play and coaching WonderTrek staff and volunteers. In a very real sense, Play Lab serves an essential research and development function for WonderTrek's play, exploration, and learning experiences expressed in its Mission:

To bring together the region's children and families in shared experiences that are grounded locally and open to the wider world. Dynamic, material-rich environments, exhibits, events, and programs engage children in the joy of play and the wonder of learning.

Play Lab's Purpose Statement identifies the broad ways in which it actively supports the Museum in accomplishing its vision and mission and serves its audiences.

Play Lab is committed to changing the way the region sees and values play in the lives of all children.



This commitment is expressed in three primary ways.

- Deepening its understanding of play through on-going inquiry, small experiments, and projects that explore the conditions that engage children and boost play value.
- Supporting and building the commitment and capacity in adults who work directly and indirectly with children of all abilities and backgrounds in formal and informal learning settings around play and interactive learning.
- Creating experiences for active play, exploration, and interactive learning, that explore the physical and social conditions that support play; and engage more children, families, and teachers in play and interactive learning.

The following WonderTrek definitions of *play* and *interactive learning* are intended to clarify and support these three important elements in the context of Play Lab's purpose.

- *Play* is freely chosen, personally directed, intrinsically motivated, and an enjoyable way in which children and adults explore and learn, using their bodies, minds, and imaginations. Play does not serve external agendas or goals but is a subjective experience that only the individual decides whether it is successful. A natural learning strategy, children develop their interests, capabilities, and lifelong skills through play.
- *Interactive Learning* is active engagement with others, objects and materials, and features of the physical environment using the senses, feelings, conversation, and the whole body. It draws on and develops skills and understandings to make meaningful connections. Choices may be determined by and guided by adults. Interactive learning can be playful.

Play Lab's Audience

Audience groups WonderTrek is interested in engaging through Play Lab

WonderTrek welcomes people of all ages, backgrounds and abilities living in or visiting Region 5. It actively seeks to serve and engage:

- Children 12 years and under
- Multi-generational families and groups
- Early years and learning professionals and middle school teachers

Within this broader audience, Play Lab serves smaller clusters who share similar interests around play and interactive learning related to the adult role and relationship to children; the nature of their interest in play; the settings in which they interact with children, their availability, etc.



These audience clusters are:

- *Museum staff and volunteers.*
Play Lab serves an internal audience of museum staff, volunteers, and consultants responsible for developing, designing, facilitating, and evaluating museum experiences including exhibits, environments, and programs.
- *Early years and school-based learning professionals who care for and/or teach children birth – 8 years in group settings.*
Play Lab places a high priority on serving in-home and center-based child-care providers; early childhood and elementary teachers in public, private, and tribal schools who are in a position to expand play experiences in their settings.
- *Friends and family who raise, care for, or homeschool children birth – 8 years.*
Play Lab recognizes the vital role that parents, guardians, family members and friends play in letting play happen in home settings and in everyday moments.
- *Administrators of early childhood and elementary level programs and schools.*
Understanding the value of play and interactive learning for young children is critical for leaders in public, private, or tribal schools or early years programs to support these experiences in programs and classrooms.
- *Educators and youth group leaders serving children and youth 8 – 12 years in out-of-school programs such as Scouts, the Y, community centers, etc.*
Play Lab believes it can provide valuable support to these educators and group leaders in developing and facilitating play and interactive learning experiences in their programs and settings.
- *Others interested in supporting children's open-ended play and interactive learning including staff at other children's museums.*

WonderTrek's Long-term Interests

Primary areas of interest where Play Lab is most active

Play and interactive learning are part of a set of overlapping, long-term interests and areas in which WonderTrek is strategic, active, and expects to have an impact. Relevant to both children and adults, these areas inform the experiences WonderTrek creates, where it seeks to develop expertise, how it engages with partners, and how it establishes a regional profile.

Consistent with WonderTrek's View of Learning,¹ play and interactive learning share significant and complementary characteristics.

- They are both active processes involving the senses, emotions, mind, language, and body.

¹ *Learning: An active, lifelong process directed by the learner. Motivated by curiosity and interests, learning engages the senses, emotions, and mind. Learning takes place over time through interactions with others and the physical environment, builds on experience, and creates new meaning. See MSMP, p. 7*



Play Lab Framework

- They involve both the child's and the adult's direct experience and engagement with people, materials, objects, the physical environment, and ideas.
- Both play and interactive learning cross developmental domains (social, emotional, physical, and cognitive), change with development, are shaped by culture and the environment, and may involve children and adults.
- While connected, play and interactive learning are also distinct processes that often appear to be simultaneous and seamless with children moving knowingly and unknowingly between the two.

Within these two areas, Play Lab prioritizes a set of topics it believes will deepen its understanding of play and interactive learning to the advantage of children, parents, teachers, and caregivers by boosting play value and making these experiences available more widely. These topics may be explored through on-going inquiry and small investigations; discussion and reflection; projects across WonderTrek; and developing and designing environments, experiences, and exhibits. They may be explored by WonderTrek and Play Lab staff, educators, parents, and caregivers.

Aspects of Play of particular interest to WonderTrek include:

- Play types considering various views of play: Free play; object; make-believe (dramatic, pretend, fantasy, etc.), construction, nature, symbolic, and games
- Age-related play, across childhood and among multi-age groups
- Cultural aspects of play
- The adult role in play
- Play's benefits to well-being, social-emotional skills, critical thinking, creativity, collaboration, and communication
- Play environments and the conditions that invite, support, and extend play
- The role of place in play: features and qualities relevant to the region in WonderTrek, other informal learning settings, schools, libraries, nature, playgrounds
- The role of materials and play objects: loose parts, toys—commercial and found, low and high technology

Aspects of Interactive Learning of particular interest to WonderTrek are:

- Characteristics of interactive learning: i.e. active, hands-on, learner directed that distinguish it from formal learning
- Social, physical, cognitive aspects of interactive learning
- Conditions and features (objects, materials, environments etc.) that support interactive learning
- Strategies for interactive learning i.e. messing around, project-based learning, etc.
- Technology's role in interactive learning
- Strategies for adults supporting interactive learning



Approach to Play and Interactive Learning

Play Lab's engagement strategies that distinguish its approach

Play Lab reflects WonderTrek's role and value as an informal learning setting that complements and supports schools, encourages learning throughout the life-span, and connects learners across the region. Informal learning settings such as museums and libraries are characterized by exploration, learning, and discovery that is:

- Learner directed
- Social, occurring through interactions with others
- Object centered and experience based
- Contextualized and embedded in a specific setting or place
- Active

Play Lab is one of WonderTrek's four Learning Experience Platforms.² These Platforms share a set of Engagement Strategies that are relevant to informal learning settings, reflect WonderTrek's view of play and interactive learning, and are capable of engaging a wide range of audiences in varied ways and settings. At Play Lab, these strategies are tailored to the interests of audience clusters, including staff, volunteers, and interns, and to creating and supporting play and interactive learning experiences.

- Play is at the heart of Play Lab's purpose, activities, and experiences. Emerging early in life, play changes with development. It exists across cultures while being viewed differently by different cultures. As an engagement strategy for Play Lab, play is valued across all domains and supported in its many expressions including make-believe, movement, building, communication, and problem solving. Play is provided for in settings where children spend time: museums, at home, school, care, and nature.
- Conversation involves speaking, listening, and gesturing that build connections among children, families, friends, and neighbors. It invites an exchange of ideas; develops shared understanding; and can create on-going dialogue across the region. As an engagement strategy for Play Lab, Conversation creates conditions for talk during play, extends discussion, and enriches spaces with words and language. Conversation also involves staff and volunteers engaging through questions, sharing information, and scaffolding.
- Materials Exploration inspires play, taps objects' symbolic potential, and sparks investigations of the material world. As one of Play Lab's engagement strategies, Materials Exploration presents a rich variety of materials and loose parts—natural, raw, human-made, found, familiar, and novel—in interesting ways, combinations, and contexts. It encourages messing around with materials as well as focused inquiries that invite observation, provoke new questions, and lead to new ideas.³

² Exhibits and Environments, Programs and Events, Initiatives, Play Lab

³ See WonderTrek's Studio Explorations Framework.



- Place-based Contexts enrich experiences, open up to new places, invite placemaking, and forge connections to home and the region. As an engagement strategy for Play Lab, Place-based Contexts draw on relevant and intriguing clues about time, space, relationships, and belonging. It brings in local materials and regional references, shared stories, regional touchstones, and varied perspectives for inspiration. Context is a backdrop and an invitation to explore physically and through the imagination.
- Digital Media extends the reach of Play Lab by connecting people and places across the region, the state, and the world. It expands and complements the range of low- and high-tech activities that Play Lab offers. As an engagement strategy for Play Lab, Digital Media makes play and interactive learning available at multiple locations; assists with research and documentation; allows staff, volunteers, parents, teachers, and care providers to revisit and reflect on practices and previous experiences; and helps create a record of ideas and accomplishments.

Play Lab Services and Activities

The varied offerings through which Play Lab delivers value

As one of WonderTrek's four Learning Experience Platforms, Play Lab contributes to WonderTrek's offerings and intended impacts. Play Lab's Services and Activities emerge from WonderTrek's Long-term Interests and are guided by the Engagement Strategies to assure a coherent, consistent, play-based, interactive approach in the spirit of play and playfulness. Services and Activities offer flexible formats capable of taking place on-site, across the region, or online. Play Lab's Services cluster into three Areas with supporting Activities⁴.

- **Programs** are facilitated activities and experiences presented by WonderTrek staff as well as by teachers, parents, early care and learning professionals, volunteers, and guest presenters. In addition to reflecting WonderTrek's priorities and exhibits, programs emerge from the interests, needs, and expertise of its audience, partners, and the community. Programs include:
 - Workshops
 - Play Institutes
 - On-boarding and Coaching
- **Play Lab Studios** are a place for play and for learning about play with a flexible format and experiential approach. Play Lab Studios guide WonderTrek in developing a deeper understanding of the conditions that support and encourage play. They offer child-led play experiences, investigate prototypes, explore play conditions, and play with ideas. As a dedicated space at WonderTrek, a virtual space, a space in the home, or at locations across the Region, Play Lab serves varied Regional audiences.

⁴ References, p. 17



Play Lab Studios include:

- Studio Explorations
- Now Playing
- WonderTrek-on-the-Go
- **Research and Evaluation** reflects Play Lab’s ongoing commitment to being a learning organization, learning from and about children, and understanding play. This area covers exhibits, environments, and programs. WonderTrek engages with parents, caregivers, educators, and community partners, as well as with WonderTrek staff and volunteers. Research and Evaluation includes:
 - Research agenda
 - Documentation and dissemination
 - An archive of inquiry projects
 - A professional library

Engaging Partners and Stakeholders

Engaging groups and organizations with shared and complementary interests

WonderTrek serves the Region with a specific organizational goal to be:

A recognized regional convener that advances the larger regional agenda around children and the challenges that it faces.

To accomplish this work, Play Lab works with a wide range of players and partners including parents, caregivers, educators, organizations, and schools in towns and cities across Region 5.

Interested in new opportunities, responsive to its partners and supporters, open to innovative use of its resources, and interested in learning from others, Play Lab serves as a multi-dimensional resource in a variety of roles around play and interactive learning.

- Play Lab as a *Connector* networks around shared interests, linking people, ideas, assets, and organizations with related expertise and shared priorities.
- Play Lab as a *Convener* brings together multiple parties around a shared interest such as nature play, play in the everyday life of the child, the adult role in children’s play, or rethinking the presence of play in classrooms and public spaces, etc.
- Play Lab as a *Collaborator* actively works with partners to explore shared interests, address more complex problems and challenges or create something new together. Collaborating with WTI⁵ cohorts and multiple partners, Play Lab contributes expertise, resources, and goodwill.
- Play Lab as a *Container* makes physical space available, serving as a host site for other organizations and individuals and their related programs or events.

⁵ See Studio Explorations Framework



- Play Lab as a *Catalyst* promotes change around play and interactive learning by expanding awareness, exploring new ideas, engaging varied perspectives, and mobilizing for action.

Play Lab Goals

Long-term direction around what Play Lab hopes to accomplish

A set of Goals represent a shift from capturing the core elements of the Play Lab Framework to activating it. The Goals provide long-term guidance for Play Lab in serving WonderTrek, advancing its interests, and giving direction to its continuing development and operations. Goals are supported by objectives and an action plan. Play Lab will:

1. Develop a rich, shared, evolving understanding around play and interactive learning that reflects and serves WonderTrek's vision and mission.
This goal is about articulating key aspects of play and its relation to interactive learning; exploring conditions that support and extend these processes; and being intentional in investigating, documenting, and sharing questions and insights about them.
2. Infuse WonderTrek's environments, exhibits, programs, and activities with high play value and playfulness.
This goal is about supporting WonderTrek in finding innovative ways to showcase its expertise and distinctive approach to play and interactive learning across its offerings: boosting play value, celebrating play, showcasing play environments.
3. Provide leadership and advocacy for making the value of play and interactive learning accessible and visible to children, parents, caregivers, educators, and decision makers across the region.
This goal is about building awareness of play and interactive learning with partners and stakeholders; integrating play and interactive learning into the regional infrastructure for wellbeing and learning from birth, across the life span; and being an advocate for and regional expert on play.
4. Support adults in their many roles in encouraging and facilitating children's play and interactive learning.
This goal is about understanding the role of adults in letting play happen and developing effective methods for engaging adults in facilitating play and interactive learning.



Moving Forward

Practices and processes for advancing Play Lab

Play Lab is a resource that can and should be used widely, referred to often, and be well-integrated into WonderTrek's mindset and practices. Becoming such a tool takes time, leadership, and commitment across the organization. Three primary areas of action and supporting steps offer starting points for Moving Forward.

1. Strategically position Play Lab as a regional resource around play, children, and childhood.
 - o Regularly update key internal players—board, staff, volunteers—on Play Lab, the driving ideas of the Framework, and Play Lab activities.
 - o Develop a communications plan about Play Lab, its purpose and what distinguishes it from play resources and experiences of regional groups serving a similar audience and a related purpose.
 - o Identify partners critical to advancing Play Lab's interests; cultivate those relationships that follow shared interests.
 - o Share the Framework with external stakeholders, highlighting ways in which they might engage and support.
2. Integrate Play Lab into WonderTrek's planning and operations.
 - o Develop action steps for Play Lab goals.
 - o Incorporate Play Lab into WonderTrek's organizational structure coordinating responsibilities among Exhibits, Programs, and Play Lab; reflect the role relationships in position descriptions.
 - o Build Play Lab into WonderTrek's business plan, optimizing Play Lab's value to WonderTrek's sustainability.
 - o Incorporate Play Lab into the Operations plan considering staffing, hours, membership, etc.
 - o Develop a timeline for bringing the full set of Play Lab Services and Activities on-line and for hiring.
3. Develop, follow, and refine practices that fully activate Play Lab and the Framework.
 - o Adapt Play Lab Charge to the Team to reflect changing responsibilities.
 - o Draw from Aspects of Play and from Aspects of Interactive Learning⁶ to inspire and guide investigations and inquiry projects.
 - o Continue to develop a shared vocabulary: i.e. types of play (object, make-believe, large motor play, etc.); loose parts; and WonderTrek programs and formats.
 - o Develop practices and methods such as *play memories* that build awareness of play experiences and generates new insights into play.

⁶ See pages 5-6



Play Lab Framework

- o Capture and communicate Play Lab's projects through documentation and posters.
- o Consistently integrate the Play Lab Framework into experience planning, research, and dissemination.
- o Build time into discussion, reviews, reflection and documentation into staff schedules, meetings, and exhibit and program development.
- o Live the Engagement Strategies as a staff: in meetings, on teams, through professional development opportunities: Play, Conversation/Discuss, Materials Exploration, Digital Media, and Place-based Context



References



WonderTrek’s Museum Strategic Master Plan (MSMP)

View of Learning (MSMP, p. 7)

An active, lifelong process directed by the learner. Motivated by curiosity and interests, learning engages the senses, emotions, and mind. Learning takes place over time through interactions with others and the physical environment, builds on experience, and creates new meaning.

Learning Experience Platforms (MSMP, p. 15)

Learning Experience Platforms are large-scale learning assets that advance the museum’s long-term strategic and learning interests and distinguish it from other organizations. These resources allow the museum to be attractive to and serve a diverse audience, be sustainable, and have a meaningful impact on the Region’s challenges and priorities. While defined as separate platforms, distinctions between Learning Experience Platforms are not always marked. Platforms can overlap as they do when activity carts are used for a demonstration in an exhibit.

- Exhibits and Environments
- Programs and Events
- Play Lab (Studio/Maker Spaces, Parent and Caregiver Resource Hub, Mobile Unit, Teachers’ Center) for Interactive Learning
- Initiatives

Audience (MSMP, p. 5)

The children’s museum welcomes people of all ages, backgrounds, and abilities living in or visiting Region 5. To achieve its mission, the children’s museum must deliberately serve:

- Children 12 years and under with a high priority on children 2 through 6 years
- Multi-generational families and groups
- Early care and learning professionals, elementary and middle school educators

This audience is comprised of a Core Audience, a Secondary Audience, and an Emerging Audience group.

WonderTrek’s Core Audience is:

- Children 2 – 10 years
- Multi-aged and multi-generational families
- School groups
- *Living in Region 5*

WonderTrek’s Secondary Audience is:

- Children, birth through 2 years
- Children and youth, 10 – 12 years
- Community and school groups
- Early care and learning professionals, elementary and middle school teachers
- *Visiting Region 5*



The Emerging Audience is:

- Youth 13 years and up in targeted experiences
- Low-income families
- Retirees
- Non-traditional museum audiences including the Leech Lake Band and the Amish
- *Living in counties surrounding Region 5*

Four C's / 21st Century Skills (MSMP, p. 17)

- Critical Thinking
- Collaboration
- Communication
- Creativity

Impact Areas (MSMP, p. 17)

- Children and youth who are *thriving*
- Families that are *strong*
- Educators and Care Providers who are *prepared and supported*
- A museum that is *community owned*
- A Region that is *connected across counties, cities, and towns*

Play Lab Services and Activities

Programs, or facilitated activities and experiences, are presented by WonderTrek staff as well as by teachers, parents, early care and learning professionals, volunteers, and guest presenters.

In addition to reflecting WonderTrek's priorities and exhibits, programs emerge from the interests, needs, and expertise of its audience, partners, and the community.

- *Workshops*: Professional development opportunities for and by educators, parents, program and play leaders around play and interactive learning.
- *Play Institutes*: Extended workshop on play topics for educators and play leaders focusing on facilitating play, the adult role in letting play happen, and setting up classrooms for play.
- *Onboarding and Coaching* for WonderTrek staff and volunteers.

Play Lab Studios are a place for play and for learning about play with a flexible format and an experiential approach. Play Lab Studios guide WonderTrek in developing a deeper understanding of the conditions that support and encourage play. They offer child-led play experiences, investigate prototypes, explore play conditions, and play with ideas.

As a dedicated space at WonderTrek, a virtual space, a space in the home, or at locations across the Region, Play Lab serves varied Regional audiences.



- *Studio Explorations*: On-going loose parts materials explorations in a dedicated studio space, blending self-directed, collaborative, and facilitated exploration.
- *Now Playing*: Pop-up prototypes at WonderTrek and across the Region developed around questions; for children, families, and teachers; and offering a fresh twist on play and interactive learning experiences.
- *WonderTrek on -the Go*: Remote delivery of existing WonderTrek Studios and programs via WonderTrek on Wheels, WonderTrek @ Home, and WonderTrek virtual.

Research and Evaluation reflects Play Lab's ongoing commitment to being a learning organization, learning from and about children, and understanding play. Grounded in WonderTrek's learning interests, Research and Evaluation covers exhibits, environments, and programs; values an action research approach in classroom, care, and outdoor settings; and documents and shares Play Lab's work. WonderTrek engages with parents, caregivers, educators, and community partners, as well as with WonderTrek staff and volunteers.

Research and Evaluation includes:

- A long-term *research agenda*
- *Documentation* and dissemination of inquiry projects with partners and other stakeholders
- An *archive* of past inquiry projects including video, photos, and examples of children's work
- A *professional library* for staff and community

WonderTrek's Inquiry process is covered in the Studio Explorations Framework.



Play Lab Specialty Team – Charge to the Team

October 24, 2024

The Play Lab team:

- Serves a cross-functional role, connecting and coordinating program development, staff development, and evaluation.
- Broadly oversees WonderTrek's learning approach and values, research bank, and practices that inform its work.
- Is a resource and connector for other teams, players, and partners.
- Play Lab Team Members: TBD

The Play Lab team carries out its work in 2 broad ways.

- It guides WonderTrek's learning interests and the interests of audience groups.
 - This involves, for instance, further articulating, sharing and integrating learning interests/long-term interests, and aligning them with organizational goals
- It relies on having multiple-perspectives working together:
 - These perspectives are from within WonderTrek: experience development and design; research and evaluation; advocating for audience groups; building internal and local capacity; and carrying institutional history.
 - It considers perspectives from outside WonderTrek related to its partners.

This work takes place across 5 areas: Programming, Research & Evaluation; Partnerships; Internal Capacity; Institutional History and Learning.

- Programming
 - The Play Lab team serves as a sounding board for program development. This is not program planning, but big picture programs, program approach, and style.
- Research and Evaluation
 - Receives updates and support from Evaluation Specialist on project evaluation, WTI and WTI LITE.
 - Articulates and advances WonderTrek's long-term interests.
 - Coordinates with experience developers around their questions and needs.
- Partnerships
 - Helps deepen WonderTrek's understanding of the interests of its current and potential partners.
 - Receives updates from Partnership Leads.
 - Coordinates partnership matters, including partnership "load".
- Growing Capacity
 - Maintains an organization wide interest in staff growth and development.
 - Promotes capacity building opportunities: i.e. workshops on evaluation.
 - Serves as a resource connector for community educators.
- Organizational History and Learning:
 - Reflects on work WonderTrek has done over the year(s), suggests priorities for the next year, and proposes a learning and research agenda.





Studio Explorations Framework

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Prepared by Cheryl Kessler & Emilee Mailhot

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GLOSSARY

Content – Children engage with content through direct experience and different ways of knowing, rather than through direct instruction.

Documentation – The gathering of information to both show what children’s play looks like and inform future Studio Explorations.

Environment: Context, Setting, and Place – The physical and social environment and its features are starting points for engagement, making connections, and discovery.

Group Reflection – A focused team conversation used to reflect on what was observed and determine possible next steps; combines interpretation and advancement.

Interactions and Relationships – Play and exploration are social experiences grounded in interactions and relationships with other children, adults, and objects and spaces.

Invitation to Explore – A thoughtfully arranged setup that sparks curiosity and encourages open-ended, child-directed engagement.

Loose Parts – Open-ended materials children can move, combine, and repurpose in endless ways to support creativity, experimentation, and flexible play.

Materials Engagement – Observing and exploring materials tells children about the world, how it works, how it is likely to work, and how they can engage with it.

Play Conditions – Environmental and relational features that support meaningful, child-led exploration (e.g., time, materials, relationships).

Strong Image of the Child – Grounds experiences and environments in a view of children as capable agents in their growth and learning and as capable and as competent learners.

Studio Explorations (SE) – Engaging experiences for children that are developed to tell us something about how children engage with materials and with other children; and how they explore, imagine, think, and have ideas.

Time – Time operates in many ways: as seasons, time of day, daily schedules, and personal clocks. Time is necessary for experimentation, repetition, and interaction.

Traces – Tangible evidence of children’s ideas, such as photos, drawings, creations, video and other recordings of what children say and do.

WonderTrek Inquiry (WTI) – A collaborative question-driven, iterative process for the WonderTrek Children’s Museum and its partners to explore, document, and share insights from children in play-based settings.

Working Question – An open-ended, observable question that guides each inquiry and focuses team observation and planning.

WTI Executive Summary – A concise overview that distills findings from an inquiry, often used to share insights with wider audiences or inform design decisions.

WTI Worksheet – A single planning and documentation tool that guides all steps of the WTI process—from question development through reflection and next steps.



Introduction

WonderTrek Children’s Museum (WonderTrek) believes it can contribute to the vitality of the region by shining a bright light on children, their potential, and their role in strengthening community life.

WonderTrek is a place-based, object and material rich, informal learning setting that engages children 12 years and under, their parents, caregivers, and teachers in making connections between ideas and actions, across systems, and with others. Its focus on children and families exploring and learning together, its understanding of the value of play, and its attention to 21st century skills come together in dynamic environments, experiences, and programs that are richly layered, locally relevant, and open onto the wider world. These hands-on, informal learning environments complement and support school priorities. They are a resource for professional development for teachers, parents and caregivers, and community programs across the region. One of these components is the Play Lab, WonderTrek’s Center for Play and Interactive Learning.

Play Lab: WonderTrek’s Center for Play and Exploration

Play Lab values play as a powerful strategy for learning and wellbeing.

Play is a way for children—and adults—to explore, engage with, and understand their world. Interactive learning is a related process for exploration and learning. Play Lab highlights the role of interaction with objects and materials, with people, ideas, and the physical environment in both play and learning in informal and formal settings.

For example, Play Lab led a 2023 collaboration with educators to implement a hands-on pilot focused on risk-taking and collaborative play, directly influencing WonderTrek’s approach to designing outdoor exhibits.

Play Lab supports two complementary interests of WonderTrek. First, it is intent on deepening the understanding of play through ongoing inquiry, small experiments, and projects that explore the conditions that engage children and boost play value. At the same time, it is committed to changing the way the region sees and values play in the lives of children. Play Lab works to support and build capacity in adults who work directly and indirectly with children from birth through 10 years of all abilities and backgrounds in formal and informal learning settings around play and interactive learning.

In acting on this commitment, WonderTrek has developed three components: Studio Explorations, WonderTrek Inquiry, and Play Conditions. Together, these components provide the following:

- Exploring each component and how the three work together.
- Including supporting background information in the Glossary and Resource sections.
- Moving from broad overviews of each component, to more specific examples, to tools for implementation, to completed samples.
- Using repetition to build familiarity with the Framework and its possibilities.



Framework Overview

WonderTrek's approach to exploring its questions about children's investigations engages children, caretakers and staff in a collaborative, on-going inquiry process. The approach is a mix of multiple museum practices such as prototyping and studio learning along with Team Based-inquiry from the NISE Network⁷, Reggio-inspired documentation⁸, practice-based research⁹, and collaborative action research¹⁰.

Based on WonderTrek's 2018 Strategic Master Plan, WonderTrek's Studio Explorations Framework integrates the three components critical to establishing and growing the Museum's play and learning value.

- **Studio Explorations** is a flexible, loose parts-rich experience format for children and families at WonderTrek and in community and school settings.
- **Play Conditions** highlight the features and attributes of play settings that encourage and support children engaging with other children, exploring materials, taking risks, following their imaginations, and learning in many ways.
- **WonderTrek Inquiry (WTI)** is a collaborative, question-driven, iterative process for WonderTrek and its partners to explore, document, and share insights from children in play-based settings.

The three components work together and build on one another.

In Studio Explorations, children engage with materials, spaces, phenomena, or relationships to discover possibilities and take tools, objects, materials, or ideas where their hands, thinking, and imaginations need to go. Children's investigations are directed by the child with the adult as a resource and co-researcher, rather than as an instructor.

WonderTrek's PlayLab, exhibits, or other programmatic space includes a set of Play Conditions selected to support and encourage children's explorations.

Children encounter invitations to explore intriguing activities that may involve building, drawing, arranging objects, taking photos, or movement, guided by a question and advanced by the WonderTrek Inquiry process. Traces of children's thinking and work invite reflection and discussion among the WTI team and, when possible, with children, parents, teachers, and partners.

A Glossary of Terms can be found after the Table of Contents.

⁷ <https://www.nisenet.org/tbi>

⁸ <https://museumnotes.blogspot.com/2014/05/documentation-looking-again.html>

⁹ https://www.researchgate.net/publication/257944497_Practice_Based_Research_A_Guide

¹⁰ https://base.socioeco.org/docs/center_for_collaborative_action_research.pdf



Studio Explorations

Studio Explorations are engaging experiences for children that are developed to tell us something about how they explore, imagine, and think.

Adapted from Studio Learning and emerging from children’s interests, everyday moments, and WonderTrek’s foundational ideas, Studio Explorations are often framed by a question or set of questions that guide planning, presentation, and reflection.

As both a physical space and an experiential approach, Studio Explorations provide a flexible format that supports varied audiences, settings, and goals. Studio Explorations may be at the WonderTrek PlayLab, at a temporary community site, or in a classroom. Varied as these settings are, each creates the conditions that support and encourage children’s play, exploration, and making connections.

Play Conditions

Play Conditions are features of the physical and social environment that support and encourage children’s exploration, play, and learning. Working at all scales and across various dimensions, these conditions engage and extend children’s exploration, play, and learning in informal settings based on research and children’s museum best practices. Seven Play Conditions work together to contribute to an inviting set-up for an exhibit, program, or Studio Explorations, indoors or out.

- Strong Image of the Child
- Context or Setting
- Invitation to Explore
- Material Explorations
- Relationships
- Content
- Time

Play Conditions are selected in response to a question such as, “What do we think will increase the chances that children will work together?” Or “What might encourage children to investigate light?”

Play Conditions also consider ages of the children, the size of the group, the presence and roles of adults, and location. In every case, selected play conditions that are brought together build on children’s confidence and capabilities in order to enrich and add complexity to their play with found, familiar, and fantastic materials; and to give children agency.

WonderTrek Inquiry

WonderTrek Inquiry (WTI) is a collaborative, question-driven, iterative process for the Museum and its partners to explore, document, and share insights from children in play-based settings.



It is integrated into WonderTrek practices and guides the Museum's ongoing inquiry into children's play and exploration through a documentation process that allows the Museum to learn from, about, and with children.

WTI moves from Museum questions to children's investigations, to reflections, giving visibility to insights. Documentation of Studio Explorations may lead to new understandings of children's thinking and ideas; new questions to explore; possible leads for experience development; or a set of posters or panels to make children's thinking and ideas visible and available to them, their parents and caregivers, educators, and the public.

Whether fielded by a project team, museum colleagues, teaching pairs, Museum partners, or a self-forming group in and/or outside of the Museum, WTI uses a collaborative approach that requires time for a group to think together, observe, and reflect.

Four main uses of WTI are:

1. An approach to learning with and about children, recognizing their capabilities, and "helping children find the meaning of what they do, what they encounter, what they experience."¹¹
2. A process that informs development of WonderTrek Museum experiences: environments, exhibits, programs.
3. An approach adaptable to various settings. WTI is available through WonderTrek's Play Lab to cohorts: educators, caregivers and others who work with children. A cohort's involvement is voluntary, learner directed, and typically involves one or more teachers, parents, coach or facilitator.
4. To extend inquiry into the Museum's on-going practice and further questions that emerge.

The intention is to study and make meaning from actual practice, recognizing that in fact there may be many meanings or understandings, not attempt to reduce what is going on to fit preconceived categorical criteria.

Gunilla Dahlberg, P.Moss, and A. Pence.
(1999) *Beyond quality in early childhood education and care.* London: Routledge

Studio Explorations

WonderTrek's Studio Explorations are experiences developed to actively engage children in exploring, playing, and learning as well as to tell us something about how they engage with the environment, materials, and other children and how they imagine, think, and have ideas.

¹¹ Rinaldi, Carlina. 2001. *Innovations.* Fall Vol.8 No. 4



Serving multiple purposes, Studio Explorations have been a strategic response to the practicalities of starting a new children’s museum. Studio Explorations allow WonderTrek to build awareness of the Museum and serve children and families during the Museum’s planning and construction phases. Studio Explorations have been offered at the Museum’s temporary Play Lab at Franklin School in Brainerd, as well as at community spaces and places, and school settings across the region’s five counties. For example:

- A 2022 Studio Exploration using tarps, ropes, and natural materials at Lum Park in Brainerd provided insights into children's material preferences, directly influencing the design of WonderTrek's exhibits, ensuring materials are both engaging and aligned with children's natural curiosity and collaborative behaviors.
- The Climber Inquiry and Development initiative, part of WonderTrek Children’s Museum’s ongoing exploration of playful, interactive spaces, investigated how children engage with climbing structures and adaptable materials. Through a series of Studio Explorations held from September 2022 to June 2023, we observed children’s interactions with the climber prototype, materials, and each other to inform the design of a multifunctional climber that supports creativity, movement, and collaboration.
- The Treehouses and Hideaways Inquiry, conducted in the fall of 2024 as part of WonderTrek Children’s Museum’s development process, explored how children engage with materials and spaces to build and personalize hideaways. WonderTrek partnered with Happy Dancing Turtle (HDT) to observe three explorations: one at Lyman P. White Park and the other at HDT’s Nature City in Pine River, MN. These explorations provided insights into children’s preferences for materials, their creative processes, and the significance of revisiting familiar spaces.

These and other experiences have served children in the Museum’s age range, 12 years and under, their families, and school and community groups.

Studio Explorations are inspired by studio learning and outdoor explorations. The flexible, loose parts-rich experience format of Studio Explorations is an adaptation of Studio Learning (Resource 1). Studio Explorations draw on a set of key elements of Studio Learning to engage children as co-developers of play and learning experiences for WonderTrek. Each of the Studio Learning elements—Studio Environment, Project Focused, Individual and Group Abilities, Presentation, and Documentation—has been adapted to an audience of young children participating in self-directed play.

Studio Explorations began to take shape in 2020 with children from the Brainerd-area YMCA. Prompted by COVID-related health concerns, WonderTrek set up loose parts play encounters outdoors at Lum Park in Brainerd for children 7-11 years enrolled in YMCA programs. Several 2-hour sessions of child-directed play were offered over the summer and fall.



Children were encouraged to explore the park's wide-open spaces along the lake shore using movable, open-ended materials such as tarps, ropes, clothespins, and PVC pipes. Observations focused on how children worked together and used existing park features such as trees, the waterfront, and playground equipment.

Studio Explorations have been evolving guided by an experimental mindset, observations of children's play, and new questions. WonderTrek's adapted studio learning approach, engaging environments, flexible formats, and loose parts in varied settings inform the other two components of the Studio Explorations Framework: Play Conditions and WonderTrek Inquiry.

Play Conditions

Play Conditions are features of the physical and social environment that encourage, support, and extend children's exploration, play, and learning. WonderTrek Children's Museum's Play Conditions both create consistency across, as well as distinguish its experiences in the Play Lab, at community events, and eventually on the campus itself from other groups that also serve children and families.

Play Conditions build on the child's competence as a learner (regardless of age), their capabilities, and interests. More than design, Play Conditions work at all scales and across various dimensions, inviting children to move, make choices, engage with other children, explore materials, take risks, and follow their imaginations. Referred to by various names in other settings, play conditions are omnipresent.

The seven Play Conditions, briefly described below, contribute to shaping experiences that *children want to jump into, stay with, and carry forward* in Studio Explorations, exhibits, programs, or at other gathering places. Dimensions of Play Conditions follow.

Strong Image of the Child informs all of WonderTrek's experiences by focusing on children's capabilities, strengths, and potential, and by setting up experiences that engage children with opportunities to explore and grow their abilities.

Environments: Context, Setting, and Place activate the physical environment and social space, from macro to micro scale, for children where they can explore, play, and learn.

Invitation to Explore selects and arranges elements to encourage children (and adults) to engage and explore an idea without giving them too much direction, but inviting noticing and wondering.

Material Explorations seed the set-up with natural objects, loose parts, phenomena, art materials, digital media, tools, etc. that: give children agency and choice; encourage exploration and experimentation that is physical, social, emotional, cognitive, and linguistic; generate new possibilities; and reveal new perspectives and insights about the world.



Interactions and Relationships bring children and adults together to engage with others; feel a sense of welcome, respect, connection, and possibilities.

Content engages, encourages, and expands children's interests in the world about what is fascinating to them, relevant, and meaningful.

Time opens up for play; extends time playing and directing play to bring enjoyment.

WonderTrek Inquiry Process

WonderTrek Inquiry Process (WTI), a collaborative, question-driven, iterative process, is adapted from Team-based Inquiry¹² to explore, document, and share insights from children.

WTI is a cycle that follows five steps:

1. Questions
2. Play Conditions
3. Documentation
4. Reflection
5. Advance/Revisit/Reframe

WonderTrek has developed and tested a set of tools for teams to use in Studio Explorations throughout the inquiry cycle. The tools can be used for both an extended line of inquiry and shorter, one-off explorations.

1. Questions:

Context-based question(s) to be investigated to inform WonderTrek experiences.

The WTI cycle begins with the development of an inquiry question or questions. The WTI Worksheet (Resource 2), is a planning tool to clarify and frame the inquiry, prioritize questions, identify the pros and cons of different methods for documentation, and prioritizing questions.

2. Play Conditions:

Studio Explorations spaces use particular play conditions to support this inquiry.

3. Documentation:

Instructions and methods for documenting and collecting information to answer context-based question(s).

This step of WTI includes three tools:

- The documentation protocol that provides specific instructions for documentation.
- Specific documentation methods that favor play-and activity-based methods (storytelling, drawings, and constructions).

¹² <http://nisenet.org>



- Traces of what children did and said: photos, drawings, video, etc., as indicated by documentation methods.

4. Reflection:

Review documentation, identify key findings and lessons learned; reveal meanings and relationships.

- **Group Reflection:** Three to five takeaways from an event, written distillation of the findings and suggestions on how data and insights can be used going forward, informing new questions or WonderTrek practices.

5. Advancing/Revisit/Reframe:

Prioritize findings for implementation to inform upcoming WonderTrek experiences. Reframe inquiry, the next question, and/or experience.

This step in the WTI process sets the stage for expanding the current inquiry, informing WonderTrek practices, or creating a new question, beginning again with the WTI Worksheet.

Tools for prioritizing findings include:

- **Documentation/Presentation:** A selection of written and visual materials to make the process and its insights visible and shareable.

Separate documents for the Play Conditions and WonderTrek Inquiry Process provide more in-depth information.



APPENDIX A - Studio Explorations Framework Resources

- *Resource 1: Adapted Studio Learning*
- *Resource 2: WTI Worksheet Example*
- *Resource 3: Executive Summary Example*
- *Resource 4: WTI Poster Example*



Resource 1: Adapted Studio Learning

Studio learning has been practiced for many decades and is most common in secondary and post-secondary programs focusing on art, architecture, and engineering. True studio learning programs are rare in museums and other informal learning environments. Elements of the practice, however, are often seen in summer camps (weeklong programs for elementary-age children) and in after-school programs for youth, typically in their middle teens. In these programs, participants work on projects that culminate in specific outputs, such as simple robots, media productions, or even a garden.

WonderTrek has drawn on a few key elements of studio learning to engage children as co-developers of play and learning experiences for the new museum. Each of these elements has been adapted to an audience of young children participating in self-directed play.

Studio Environment.

In teaching situations, studios are dedicated spaces well outfitted with tools, equipment, and supplies. For WonderTrek audiences, the studio is a dedicated place and a variable assemblage of loose parts and structures that can be reconfigured at different locations. In this way, the studio is a destination and a concept around which ideas emerge and are played around with.

Project Focused.

In typical studio learning programs, small groups of students are assigned projects to complete together and individually over a set period of time. During this time they conduct experiments, make revisions, and test variables—all towards building, growing, or producing their final outputs. In WonderTrek's studio experiences, children establish their own projects, of differing scales and levels of involvement, and determine how they go about getting them done. A ball run constructed in minutes is a project, as is an impromptu stage performance.

Individual and Group Abilities.

Participants use their developing skills and talents to express their ideas and give shape to imagined experiences. In groups, they explore ideas collaboratively, working toward shared goals—immediate and longer-term. In formal teaching situations, groups of students work together sometimes for many weeks, getting to know one another through the shared experiences of their studio. At WonderTrek, children arrive for events often not knowing other children, yet get involved in playful interactions that parallel the kind of engagement seen in more formal studio environments.



Presentation.

At various points during a formal studio project, participants have opportunities to present their work. In Studio Explorations, children present their accomplishments to others in many ways. Attracting the attention of an adult caregiver, a child can say “look at this” while demonstrating a complex configuration of balancing parts. Children can also be asked to talk about their project, connecting it with imaginative narratives that reveal specific purpose and function—a fence that horses can jump but dogs can’t.



Resource 2: WTI Worksheet Example

WTI Worksheet

Slide! Design Your Ride

3.1.2025

Quick Question Setup

Working Question:

What makes a good sled?

Importance: *Why the question is significant?:*

To understand how children use materials to create sleds and how these choices impact their sledding experience in terms of functionality and enjoyment. This inquiry builds on insights from Franklin Arts and Leech Lake and allows us to refine observations based on prior iterations.

Play Conditions

Setting and Timing:

- Located at Northland Arboretum near the nature scape and sledding hill.
- The outdoor setting provides an opportunity to test sled designs on a more defined hill than previous sites.
- The trailer will be used as a warming and workshop space for sled design.

Materials:

- Everyday Items & Loose Parts: Flat cardboard pieces, pre-constructed cardboard pieces, styrofoam (sturdy, non-flaking), tarp.
- Construction & Fastening Materials: Plastic screws, nuts & bolts, tape (if weather conditions allow), vinyl linoleum pieces.
- Tools & Exploration Materials: Hand tools (screwdrivers, punches, leather punch, small saws), tape measures.

Setup:

- Trailer as a warming and workshop space for sled design.
- Observers stationed to document material exploration and sled testing.
- Workshop area equipped with fasteners and tools for children to construct their sleds.
- Sledding hill designated for testing.
- Materials staged in an accessible and inviting manner.

Invitation to Explore:

Slide! Design Your Ride WTI_Play Lab 3.1.2025

1



- Children are encouraged to explore different materials and experiment with sled construction.
 - Facilitators will use open-ended questions such as:
 - "Tell me about what you're doing."
 - "How did you design your sled?"
 - "What ideas do you have for making it go faster?"
 - Drawing area available inside the trailer for children to sketch and describe their sled ideas.
 - Materials are placed to prompt discovery and experimentation (e.g., comparing different sled bases for speed and control).
-

Documentation

Focus:

- How children interact with materials and tools.
- Material choices and their impact on sled function.
- Children's problem-solving and iterative design approaches.
- Observations on how children respond to environmental conditions (cold, snow texture, slope).

Documentation/Observation Method:

- Observers will take notes and photos/videos (as permitted).
 - Audio recordings or direct quotes from children discussing their sled designs.
 - Group reflections from observers on emerging patterns and notable interactions.
-

Immediate Reflection

Key Observations: *Brief summary of critical findings from the exploration.*

- Children engaged in both structured sled design and open-ended material exploration.
- The workshop space played a significant role in organizing materials and facilitating trial-and-error design iterations.
- The proximity of the hill to the workshop influenced play, allowing for quick transitions between testing and modifying sleds.
- Cold weather conditions and icy terrain impacted material choices, with children favoring certain sled bases for speed and control.



Insights: *Immediate reflections on key insights, observations, and documentation.*

- The workshop space encouraged iterative design, with children frequently returning to modify their sleds.
- Organization of materials improved accessibility and helped maintain a flow between design and testing.
- Children adapted designs based on what they observed from peers, adjusting for speed, durability, or comfort.
- Limited resources (e.g., shared tools, single duct tape roll) encouraged collaboration and problem-solving among groups.

Discussion: *If applicable, note any brief discussions with observers or participants.*

- The workshop space played a crucial role in the design process, allowing children to quickly modify and test their sleds without disrupting their engagement. The ability to return to the workspace between test runs reinforced the iterative nature of the activity.
- Children made design decisions based on both personal trial-and-error and peer observations, though modifications were often influenced more by their own testing rather than direct collaboration with others.
- The availability and organization of materials shaped engagement, as clearly accessible resources helped children stay focused on testing and refining their sleds.
- Cold weather and terrain conditions impacted material choices, leading children to favor sled bases that provided stability on icy patches rather than prioritizing speed.
- Limited resources encouraged problem-solving and informal collaboration, as children navigated shared tools and materials, negotiating access and adapting when supplies were in use by others.

Wrap-Up

Takeaways: Major takeaways and actionable points.

- The workshop space significantly impacted engagement, enabling children to iterate on their sled designs quickly and efficiently.
- Children prioritized functional testing over aesthetic design, frequently modifying sleds based on performance rather than appearance.
- Peer observation influenced design choices, but direct collaboration was minimal, with most children focused on their own projects.

Slide! Design Your Ride WTI_Play Lab 3.1.2025

3



- Cold weather and terrain conditions shaped material selection, with children opting for sled bases that provided stability and control.
- Limited resources encouraged problem-solving, requiring children to negotiate material use and adapt when tools or supplies were unavailable.

Next Steps: Decide on any follow-up actions or if the question needs to be revisited later.

- Explore additional ways to encourage peer collaboration, possibly through structured design challenges or team-based iterations.
- Adjust the setup to improve adult participation, potentially providing clearer guidance on how they can facilitate deeper engagement.
- Consider expanding material options to include a wider variety of textures, weights, and structures, giving children more opportunities to experiment with different sled designs.

Slide! Design Your Ride WTI_Play Lab 3.1.2025

4



Resource 3: Executive Summary Example

Executive Summary: Slide! Design Your Ride

Compiled by Emilee Mailhot
3/12/2025

What makes a good sled?

The *Slide! Design Your Ride* inquiry, conducted through WonderTrek Children's Museum's WTI process, explored how children engage with materials, design, and experimentation to create functional sleds. Across multiple locations, including Northland Arboretum, Leech Lake, and other Play Lab settings, this inquiry examined children's material choices, problem-solving approaches, and adaptations to environmental factors. Each phase of the inquiry provided insights into how children of varying ages approach sled design, from iterative engineering and performance testing to open-ended exploration and sensory play. The sessions also highlighted the role of adult facilitators and how environmental conditions influenced engagement.

Observations & Insights

The January 26, 2025 session at the WonderTrek Play Lab introduced a broad range of materials, including pool noodles, storage bins, peanut balls, and fabric. A structured [Design Zone and Test Zone](#) provided space for construction and [experimentation](#). Older children around age 12 focused on optimizing sled performance by modifying designs for [speed, stability, and steering](#), whereas children under age 7 prioritized [creative construction](#) rather than performance. Parents played a [key facilitative role](#), assisting with [tying materials](#) and encouraging participation. New families attended the event, demonstrating accessibility and broad appeal.

The session highlighted key themes, including age-based differences in problem-solving and material use, the social environment's role in engagement, and the importance of tailored invitations to explore for different developmental stages.

Sessions at Leech Lake Head Start on February 5-6, 2025, took place on a [smaller hill](#) with a younger age group, shifting the focus toward [exploratory play](#). Instead of structured sled-building, children [engaged with materials](#) through sensory exploration, surface testing, and movement experimentation. Many younger children interacted with materials in [tactile ways](#), feeling textures and testing friction rather than focusing on functional sled design. The lack of a steep hill led to alternative forms of play, such as pushing and [pulling sleds](#) rather than traditional sledding. Adults played a more logistical support role, mainly helping children dress for the weather rather than actively facilitating the activity.

Key insights included the importance of material exploration as a prerequisite for structured sled-building among younger children, the significant influence of environmental conditions on play patterns, and the need for greater adult involvement to support guided experimentation and sustained engagement.

Slide! Design Your Ride Executive Summary Report
March 2025

1



The third *Slide: Design Your Ride* session on March 1, 2025, took place at Northland Arboretum. Children were provided with a structured [Design Zone](#) and [Test Zone](#) featuring a defined [sledding hill](#). Materials such as cardboard, styrofoam, and vinyl pieces were offered alongside [tools](#) like screwdrivers and tape. Children engaged in [structured sled design](#), modifying materials based on speed and control. The proximity of the hill to the design area allowed for quick iteration and adjustments. Cold weather and [icy terrain](#) influenced material choices, with children favoring sturdier sled bases over flexible or decorative elements. Resource limitations, such as [shared tools](#) and limited tape, encouraged [collaborative problem-solving](#).

Key insights from this session include the impact of a well-equipped workshop space on engagement, the role of peer observation in influencing design decisions, and the iterative nature of the design process, with children returning to adjust sleds after each test.

Takeaways & Future Considerations

Iterative design was a central theme, with older children refining sleds for speed, stability, and control. Younger children required time for material exploration before engaging in structured problem-solving. Environmental conditions, such as the presence or absence of a steep hill, influenced how children interacted with sledding materials. Adult facilitation played a key role, with greater engagement from adults and caregivers leading to increased participation and collaboration. While peer observation influenced design choices, structured collaboration activities could enhance teamwork.

Future inquiries may consider adjusting invitations to explore based on age, incorporating a wider range of sled-building materials, and modifying adult facilitation strategies to encourage deeper engagement. Additional research questions could explore how children's definitions of a "good sled" evolve with experience, the role of adult encouragement in fostering iterative design, and how terrain variations influence sled-building strategies.

The full WTI Worksheets and Reflection Documents are available for further review:

- [Slide! Design Your Ride - January 26, 2025](#)
- [Leech Lake WTI Worksheet - February 5-6, 2025](#)
- [Northland Arboretum WTI Worksheet - March 1, 2025](#)



Resource 4: WTI Poster Example

Slide! Design Your Ride



What Makes a Good Sled?

WonderTrek Children's Museum invited children and families across three north-central Minnesota locations to design & test their own sleds using a wide variety of open-ended materials in different winter environments.







What Children Did

Children tested different materials such as cardboard, fabric, foam, and tape to create and improve their sleds. At some sites, they used tools like screwdrivers and connectors. They moved between the workshop and sledding hill, adjusting sleds based on how well they slid, how far they went, or how easy they were to ride.



What We Noticed

Children explored materials through trial and error. Younger kids focused on texture and movement, while older ones tested for speed and control. Play shifted based on terrain, layout, and what children saw working for others. Easy-to-use and effective materials were used most.

Why Sled Design

By observing how children design and test their sleds, we learn how they make sense of material properties like weight, texture, and balance through play. Their hands-on experimentation, testing, and redesign show us how they problem-solve, take risks, interact with materials, and take temperature into account in meaningful ways.

 This work is funded in part by MHC with money from the Arts and Cultural Heritage Fund that was created with the vote of the people of Minnesota on November 4, 2008.

 **WonderTrek**
CHILDREN'S MUSEUM

 Minnesota
Humanities
Center





Play Conditions Framework

Revised Spring 2026
Prepared by Emilee Mailhot

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GLOSSARY

Agency - A child's capacity to take action, make choices, direct their own play, and influence their experience.

Content - The ideas, concepts, and knowledge that emerge through play, shaped by children's interests and experiences.

Emergent Learning - Learning that develops naturally from children's interests, actions, and experiences rather than from predetermined learning outcomes.

Environment: Context, Setting, Place - The physical, social, and sensory conditions that influence how children explore, connect, and experience belonging.

Evidence-Based Beliefs - Understandings of what is known about each Play Condition, grounded in theory, research and practice.

Exploration - The processes through which children engage, investigate, experiment, and make sense of the world through play.

Facilitation - The ways adults support, extend, and respond to children's exploration and play without directing or controlling it.

Interactions & Relationships - Verbal and nonverbal exchanges among children, adults, and objects that build connection, collaboration, and shared understanding.

Invitation to Explore - The arrangement of space, materials, and experiences that spark curiosity and encourage children to investigate, experiment, and discover.

Loose Parts - Assorted, moveable, found, and open-ended materials—tangible (e.g., wood, fabric) objects and intangible (light, shadow, water, color)—with no fixed purpose that extend children's play and imagination and can be used in many ways.

Materials Engagement - Children's experience with varied and real materials objects and tools through observation, exploration, and experimentation.

Opportunities for Application - Specific examples of how environments, materials, and interactions can bring each Play Condition to life in practice.

Play Conditions - The physical, social, and symbolic qualities that support, shape, and extend children's play across environments, experiences, and programs.

Scaffolding - Support from an adult or more experienced peer that extends a child's thinking or actions while keeping the child in control.

Sense of Belonging - A feeling of being welcomed, valued, and connected within a setting and with others relationship, or experience.

Sense of Place - A feeling of connection to a space, shaped by environment, culture, and personal experience.

Strong Image of the Child - A fundamental belief in children's capabilities, competence, and curiosity as learners and agents.

Supporting Approaches & Strategies - Broad, guiding methods that shape how each Play Condition is embedded into planning and facilitation.

Time - The pacing and duration of play that allow for deep engagement, repetition, and the development of ideas and relationships.



Introduction

This document presents WonderTrek’s Play Conditions Framework—the foundational qualities that shape how play is supported, observed, and understood across all WonderTrek environments, experiences, and programs.

The Play Conditions express the beliefs and practices that create meaningful, inclusive, and developmentally rich play experiences. They align staff, collaborators, and partners around a shared approach to play that is consistent and evidence-based.

The seven Play Conditions—Strong Image of the Child; Environments- Context, Setting & Place; Invitation to Explore; Materials Engagement; Interactions & Relationships; Content; and Time—define the essential elements that make play possible and meaningful. Each interacts with and supports the others, forming a cohesive framework for designing, facilitating, and reflecting on children’s learning through play.

The *Play Conditions* work in concert with WonderTrek’s guiding frameworks:

- **Studio Explorations Framework** – outlines inquiry-based, hands-on processes that guide program and exhibit design. It bridges research and practice through cycles of observation, reflection, and prototyping, providing the structure for testing and refining the Play Conditions in real-world settings.
- **Play Lab Framework** – defines the setting and facilitation strategies for child-directed exploration. Developed through the Play Lab: WonderTrek’s Center for Play and Exploration, it establishes the physical and social contexts where the Play Conditions come to life, shaping how children engage with materials, spaces, and one another.
- **WonderTrek Inquiry (WTI) Process** – provides methods for observation, documentation, and reflection. Its purpose is to help Playworkers and teams study how the Play Conditions appear in action, translating observation into shared insight that strengthens facilitation, design, and evaluation.

These documents form WonderTrek’s comprehensive approach to designing and facilitating play and learning—an integrated system that connects philosophy, environment, and practice across all programs and experiences.



How to Use This Document

Each Play Condition, covered in its own section, is explored from five perspectives:

1. **Evidence-Based Beliefs** – what research and practice tell us about this condition.
2. **Supporting Approaches & Strategies** – ways to embed these beliefs into planning and facilitation.
3. **Opportunities for Application** – examples of how the environment and materials can activate and support the condition.
4. **Playworker Role & Practice** – actions and mindsets that strengthen this condition in practice.
5. **Parent / Caregiver Role & Practice** – ways to extend and connect play at home and in daily life.

The Play Conditions that follow outline the essential qualities that support rich, meaningful play at WonderTrek. Together, they form a shared foundation for how we design environments, prepare experiences, and engage with children and families. Each condition highlights a different dimension of play—how children explore, interact, make meaning, and deepen their learning. Taken as a whole, this framework helps ensure that WonderTrek’s practices are intentional, developmentally grounded, and consistently aligned across programs, studios, and settings.

PLAY CONDITION 1: Strong Image of the Child

The first Play Condition, Strong Image of the Child, grounds the entire framework. It reflects WonderTrek’s belief that children are capable, competent, and curious from birth. Seeing children in this way shapes every decision—from how environments are designed to how adults interact, observe, and support learning. This condition reminds us to trust children’s ideas, follow their lead, and recognize the richness of what they bring to each experience.

Evidence-Based Beliefs

Strong Image of the Child

- Our image of the child impacts how we design programs and interact with both children and adults.
- Children are capable, competent, curious, and full of potential from birth.
- Focusing on what children can do—regardless of age, abilities, or background—supports their growth and development.
- Children leverage their strengths and previous experiences to develop their capabilities.



- They are not just consumers of others' ideas and creativity but generate ideas and possibilities themselves.
- We view ourselves and others as researchers learning from children, recognizing their capacity to lead and shape their own learning experiences.

Supporting Approaches & Strategies

Strong Image of the Child

A strong image of the child begins with an intentional focus on children's capabilities, perspectives, and ways of making meaning. This approach emphasizes language and interactions that honor children as competent learners and active participants in shaping their experiences. It also includes fostering a shared belief—within WonderTrek and among partners—that children are curious, capable, and deserving of agency. Adults support this image by creating conditions that encourage independence, exploration, and thoughtful decision-making.

Opportunities for Application

A Strong Image of the Child

- Images, language, and contexts reflect a positive and capable view of the child.
- Multi-sensory, multi-modal experiences and open-ended materials engage a wide range of ages and abilities.
- Spaces, objects, and materials scaled to children's perspectives to promote agency, independence, and meaningful choice.
- Environments designed from a child's viewpoint to nurture confidence, exploration, and self-direction.
- Children are valued as social, active, and curious beings—exploring materials, forming connections, and expressing ideas through play.

Playworker Role & Practice

A Strong Image of the Child

- Recognize children as social, active and curious in exploring materials, asking questions, connecting with people, expressing feelings and ideas.
- Listen actively and observe with curiosity first.
- Scaffold children's efforts and learning.
- Ask open-ended questions with a goal to learn from or about the child.
- Reflect upon your personal image of the child and whether your actions align with your beliefs.



Parent / Caregiver Role & Practice

A Strong Image of the Child

- Try seeing your child as capable, competent, and curious.
- Encourage exploration and independent problem-solving by offering time and space to figure things out.
- Consider observing your child with curiosity before stepping in to help.
- Let your child choose how to approach an activity, even if it looks different from what you expected.
- Tune in to your child's interests, then step back to let them take the lead.
- Think of yourself as a “tool” for your child's learning—consider how your actions can support and extend their ideas.
- Try letting play or exploration end naturally, trusting your child to decide when they're finished, rather than redirecting too soon.
- Describe what your child is doing or noticing rather than labeling or judging their actions. This helps them feel seen, builds language, and strengthens your connection.

PLAY CONDITION 2:

Environments — Context, Setting & Place

The environment is an active participant in play. Its design and atmosphere shape the quality of children's experiences, inviting movement, engagement, and belonging while reflecting the communities and natural settings that create meaning and connection for children and families.

Evidence-Based Beliefs

Environments - Context, Setting & Place

- The environment includes the physical space, materials, and sensory qualities that shape how children explore, connect, and feel a sense of belonging.
- Environments are the setting and backdrop for exploration, play, and learning.
- Physical, social, and cognitive places carry meaning and convey a sense of safety, welcome, belonging, and possibility. Space organizes time and activities, promotes relationships between children and adults, offers choices, sparks many kinds of social and affective learning, and contributes to a sense of well-being.
- Environments and the settings that characterize them evolve with time and use.



- When considered intentionally, environments lead to meaningful connections that result in an emotional connection and attachment to place—a *sense of place*.
- A richer, more diverse environment affords a more diverse play and learning experience.

Supporting Approaches & Strategies

Environments - Context, Setting & Place

Thoughtful environments **honor children’s developmental capabilities** and invite movement, exploration, and comfort. A well-designed space is **safe as necessary, responsive to the senses, and expressive of beauty** in ways that encourage care and engagement. These environments convey a clear sense of place—reflecting the where, when, and how of a setting—and are shaped by the interests, backgrounds, and lived experiences of children and adults. By creating learning landscapes activated through play, WonderTrek prioritizes positive, hands-on experiences that support belonging, curiosity, and meaningful connection.

Opportunities for Application

Environments - Context, Setting & Place

- Create spaces that support a range of play types—sensory, constructive, physical, narrative, indoor, and outdoor.
- Design environments with variety—open, enclosed, high, and low—to encourage exploration and choice.
- Ensure clear sightlines and accessible layouts that allow children to move confidently and independently.
- Offer comfortable places for rest and reflection alongside active areas for movement and play.
- Use light, sound, temperature, and scale intentionally to influence the rhythm and atmosphere of play.
- Incorporate elements of the local environment to strengthen a sense of place and connection to community.
- Cue different types of play through environmental details—arrangement, materials, or visual design.
- Connect indoor and outdoor areas to encourage continuity of exploration and discovery.



Playworker Role & Practice

Environments - Context, Setting & Place

- Welcome and accept what all people bring to an environment.
- Care for environments, indoors and out.
- Be aware of the contextual factors shaping the environment.
- Accept and manage the free flow of objects and materials.
- Decorate selectively, highlighting children’s work and contributions.
- Observe children’s use of space and environmental features to support and extend exploration and play.
- Reflect upon the spaces and environments—consider how they are working for children and families, and what could be shifted.
- Consider placement of materials (eye level, organization, and independent access).

Parent / Caregiver Role & Practice

Environments - Context, Setting & Place

- Tune in to what sparks your child’s curiosity—notice where they linger, what draws their attention, and allow them to move freely through the immediate and larger space.
- Consider stepping back to observe how your child explores before offering help or direction.
- Engage with open-ended questions such as “What do you think will happen if...?” or “Tell me about what you’re building!”
- Share stories of places you loved to play and felt connected to, helping your child build their own sense of place.
- Embrace the ever-changing nature of spaces that evolve through children’s contributions and interactions.
- You might notice how your child’s movement changes as they discover new areas or materials.
- Describe what your child is doing or noticing in the space to help them build awareness and language.

PLAY CONDITION 3:

Invitation To Explore

As crawlers, curiosity seekers, and investigators, children find invitations everywhere. The Invitation to Explore condition focuses on what draws them in—the arrangements, materials, and surprises that spark interest and wonder.



A well-crafted invitation sets the stage for discovery, motivating children to enter, question, and experiment as they make sense of the world around them.

Evidence-Based Beliefs

Invitation to Explore

- Children are natural explorers, finding invitations everywhere.
- While how they explore may change over time, a child's interest in exploring and discovering does not.
- Exploration takes many forms—visual, verbal, physical, and social; small and large motor.
- A compelling invitation generates a desire to enter and become part of the experience and makes the possibilities visible.

Supporting Approaches & Strategies

Invitation to Explore

Inviting exploration begins with **placing materials at the center of children's experiences and designing setups that spark curiosity and wonder**. This approach draws on a range of invitation types—welcomes, puzzles, mysteries, and challenges—that encourage children to enter, notice, and engage. It emphasizes presenting materials in fresh, unexpected ways, using the Play Conditions themselves as inspiration for discovery. By **incorporating elements that surprise, delight, and motivate movement**, adults create environments where children feel compelled to explore, experiment, and follow emerging ideas.

Opportunities for Application

Invitation to Explore

- Highlight objects and materials that spark wonder and curiosity through scale, color, texture, or movement.
- Select materials for their qualities—novelty, complexity, and open-endedness—to encourage engagement and exploration.
- Arrange materials and objects to invite discovery, experimentation, and imaginative play.
- Design setups that encourage participation and creativity, inspiring children to return and explore again.
- Reinvigorate spaces by combining unexpected materials, offering new challenges, or creating visual prompts that invite discovery.



Playworker Role & Practice

Invitation to Explore

- When resetting, relaunch the invitation—incorporate insights from children’s exploration rather than just repeating the setup.
- Jump in and explore the invitation yourself.
- Welcome exploration through the various types of play that emerge.
- Observe and notice those not engaging or responding to the invitation—connect and adjust to include them.
- Extend play by making the possible visible: use surprise, add or remove materials, or combine materials in new ways.

Parent / Caregiver Role & Practice

Invitation to Explore

- Follow your child’s lead, letting their curiosity guide the pace and direction of play.
- Explore and discover alongside your child—immerse yourself in the activity and share in the joy of play together.
- Allow each activity to come to its natural conclusion, giving your child time to decide when they are finished.
- Find reasons to revisit the experience together, noticing what has changed or what new questions arise.
- Pause before offering help, and watch what your child chooses to do next.
- As moments invite, join your child in discovery and explore together, responding to their interests and ideas.

PLAY CONDITION 4: Materials Engagement

Children learn from direct experience with materials that can be touched, shaped, combined, and transformed. The Materials Engagement condition recognizes the sensory and expressive power of materials and the way they invite experimentation and creativity. It emphasizes providing diverse, authentic, and open-ended materials that encourage hands-on exploration, problem-solving, and imaginative play.



Evidence-Based Beliefs

Materials Engagement

- Exploration of the material world starts in infancy.
- Children are fascinated by what things are made of—wood, plant material, clay, plastic, fabric, glass, metal, and sponges.
- Children learn to navigate their world through the information held in objects and materials that they touch, feel, hear, smell, and observe.
- A richer, more diverse environment and material offering affords a more diverse play and learning experience.
- Loose parts—tangible and intangible, like light, shadow, water, or color—have no fixed purpose. Their potential lies in how children use them through movement, imagination, and collaboration.
- Children at different ages and with varied background experiences engage with materials differently.

Supporting Approaches & Strategies

Materials Engagement

Supporting rich material engagement **involves offering a diverse selection of authentic, open-ended materials that invite hands-on exploration across ages and abilities.** This includes loose parts, tools, and building elements that encourage wondering, noticing, and describing. The approach prioritizes “real stuff” that allows children to experience genuine qualities, processes, and interactions. By selecting materials that work at multiple developmental levels and that change with use, adults create opportunities for experimentation, creativity, and deeper understanding of the material world.

Opportunities for Application

Materials Engagement

- Seed environments with a rich mix of natural objects, loose parts, phenomena, art materials, digital media, tools, and other open-ended elements that invite discovery.
- Select materials that engage the senses and offer meaningful experiences across ages, abilities, and levels of exploration.
- Arrange and present materials intentionally to highlight their unique qualities, enhancing curiosity and creative possibilities.
- Use trays, baskets, or organized groupings to make materials visually appealing, accessible, and easy for children to explore independently.



Playworker Role & Practice

Materials Engagement

- Give children agency and choice with materials.
- Encourage exploration and experimentation that is physical, social-emotional, cognitive, and linguistic.
- Be curious about the materials being introduced to children and how they explore them.
- Let go of worrying about the mess.

Parent / Caregiver Role & Practice

Materials Engagement

- Try giving your child agency and choice with materials, allowing them to decide how to use and combine them.
- Observe with curiosity how your child engages with different materials before stepping in to guide.
- Welcome the many ways children use objects and materials, even when it's unexpected or unconventional.
- Explore materials alongside your child, showing interest and wonder in what they discover.
- Engage in conversation from a place of curiosity—ask about the textures, colors, or selections your child makes.
- Consider ways to extend materials exploration at home through creative reuse or nature-based collections.

PLAY CONDITION 5: Interactions & Relationships

Play and exploration are social experiences grounded in interactions and relationships with other children and adults. This condition centers on the exchanges—verbal and nonverbal—that build understanding, cooperation, and a sense of belonging. Through these relationships, children learn to share ideas, negotiate, collaborate, and see from multiple perspectives.



Evidence-Based Beliefs

Interactions & Relationships

- Interactions and relationships are at the heart of play and learning.
- They are physical, social, and emotional, occurring with people, objects, and spaces.
- In the back-and-forth of play, children and adults observe, talk, listen, think, and laugh together.
- Play and exploration are social experiences grounded in interactions and relationships among children and adults.
- Children enlist others—both children and adults—in accomplishing their goals and ideas, using them as “tools.”
- Children like to engage with others, to be part of a group, to help others, and to accomplish something bigger together.
- Interactions include both verbal and nonverbal exchanges—gestures, facial expressions, shared focus, and coordinated actions that communicate ideas and emotions.

Supporting Approaches & Strategies

Interactions & Relationships

A focus on interactions and relationships **begins with fostering natural collaboration and supporting children as they work together.** This approach incorporates strategies such as scaffolding, mixed-age groupings, and designing experiences that encourage negotiation, cooperation, and mutual support. It recognizes that the availability of materials and activities shapes how children relate to one another and emphasizes creating environments that promote welcome, respect, belonging, and connection. Adults bring awareness to their own perspectives and biases, approaching each interaction with openness, curiosity, and a commitment to understanding diverse viewpoints.

Opportunities for Application

Interactions & Relationships

- Foster a wide variety of opportunities for interaction—sharing, handling large materials, co-creating structures, and building stories together through play.
- Recognize that the power of loose parts lies in how children use them—with their hands, bodies, and minds—and how those actions connect them to one another.
- Consider different perspectives and points of view, creating inclusive experiences that reflect, respect, and celebrate every child’s way of relating and contributing.



Playworker Role & Practice

Interactions & Relationships

- Be attentive and respond to children’s interests and questions.
- Actively listen, learn, and adapt to support each child and caregiver with openness and empathy.
- Highlight relationships and connections between ideas, actions, materials.
- Encourage children’s working together and build on others’ ideas.
- Allow for the flow of the child/children between groups, making choices, exploring with others.
- Capture and share actionable insights with other playworkers about all of the play conditions.
- Engage in ongoing reflection about how our identities and experiences shape our perceptions.

Parent / Caregiver Role & Practice

Interactions & Relationships

- Try inviting conversation with your child and responding with interest to their ideas, questions, and observations.
- Create something new together, allowing space for imagination, collaboration, and shared decision-making.
- Encourage your child to contribute in their own way, valuing individual approaches and perspectives.
- Consider stepping outside your comfort zone to model positive risk-taking and strengthen connection—whether with your child, another family, or a group.

PLAY CONDITION 6:

Content

Program content emerges from and connects with children’s interests and what is fascinating and meaningful to them. The Content condition highlights the idea that learning through play is not prescribed but discovered—shaped by children’s curiosity, experiences, and the questions they pursue. It reflects WonderTrek’s belief that deep understanding develops through active engagement and reflection.

Evidence-Based Beliefs

Content

- Content takes many forms—implicit (child development, play), conceptual (cause and effect, patterns), and explicit (facts, vocabulary).



- There are many ways of knowing, using, and sharing content—through thinking, exploring ideas, and imagining new possibilities.
- Children are naturally interdisciplinary thinkers and doers.
- Content is embedded in children’s questions and interests, keeping them engaged and motivated to learn.
- Content is experienced through all the senses.
- In the early years, content favors process over facts and emerges as one of the many outcomes of exploration.

Supporting Approaches & Strategies

Content

Approaching content through play means **allowing experience to lead, letting ideas surface naturally through exploration rather than directing learning toward predetermined outcomes.** This strategy builds on children’s interests, using their questions, observations, and discoveries as pathways for deeper engagement. It recognizes that content lives within materials, environments, and interactions, and that children make meaning by connecting ideas across topics and contexts. By following these connections and incorporating children’s contributions, adults support a learning process that is emergent, interdisciplinary, and grounded in curiosity.

Opportunities for Application

Content

- Present ideas and information in playful, open-ended ways that invite exploration, creativity, and personal meaning-making.
- Frame content through an interdisciplinary lens that connects diverse interests and experiences, offering multiple entry points that meet children where they are.
- Provide varied opportunities to explore concepts through many modalities—movement, song, art, storytelling, writing, and imaginative play.
- Support children’s curiosity and insights through active listening, thoughtful questioning, and meaningful discussion that deepens understanding.

Playworker Role & Practice

Content



- Follow and respect children’s interests, ideas, and knowledge.
- Welcome exploration where content unfolds naturally.
- Notice and articulate content connections that are meaningful to the child, allowing them to play without interruption.
- Add information only when it enhances the experience.
- Invite questions to explore children’s understanding of ideas and concepts.
- Model curiosity and wonder.

Parent / Caregiver Role & Practice

Content

- Follow your child’s lead and notice what sparks their curiosity.
- Support and extend their interests through shared experiences—family outings, projects, books, and conversations.
- Allow ideas and learning to unfold naturally through exploration, rather than directing or correcting.
- Consider holding back from providing facts or explanations right away to keep discovery child-driven.
- Show your own sense of wonder and curiosity to encourage deeper exploration without taking over.
- Celebrate curiosity, problem-solving, and discovery as meaningful parts of the learning process.
- When your child asks a question, explore it together—experiment, observe, and wonder alongside them.

PLAY CONDITION 7:

Time

Time influences how play unfolds, deepens, and connects across moments, days, and experiences. This condition recognizes that meaningful play requires time for ideas to grow and relationships to develop. Unhurried pacing allows children to return, revisit, and extend their thinking, while giving adults the opportunity to observe, listen, and respond thoughtfully.

Evidence-Based Beliefs

Time



- Time organizes, surrounds, and influences all other Play Conditions.
- Time spent playing is never wasted—learning unfolds over hours, days, weeks, and years.
- Attention spans vary by individual, circumstance, and age.
- Relationships and ideas develop through time and repetition.
- Time is an evolving concept, shaped by experience and culture.

Supporting Approaches & Strategies

Time

Supporting children’s use of time requires creating conditions for unhurried, meaningful engagement. This approach **values depth over speed, offering choices that extend exploration** rather than interrupt it. It includes allowing children to determine when play begins and ends, **designing environments that invite lingering and return visits, and recognizing the role of repetition in developing ideas and relationships**. Adults observe pacing, protect moments of focus, and adapt plans in response to children’s timing—honoring the ways learning unfolds across minutes, hours, days, and beyond.

Opportunities for Application

Time

- Plan for flexibility in pacing, preferences, and approaches, allowing time to expand or contract with children’s engagement.
- Create environments that suggest natural rhythm and flow, offering areas for both active play and quiet reflection.
- Foster connections to other times and places—recent or distant, familiar or new—through materials, stories, or shared experiences.
- Use lighting, sound, and visual cues to influence rhythm, mood, and transitions without disrupting play.
- Recognize moments of boredom as opportunities for curiosity, creativity, and renewed engagement.
- Observe how children use time and adapt experiences to match their focus and energy, encouraging revisiting and extending ideas to deepen learning.

Playworker Role & Practice

Time



- Let children find their own pace and stay with it.
- Give children time to think, decide, and choose.
- Allow children to return to and add to their previous work.
- Take time to observe, redirect, and reframe—adapt rather than rush.
- Follow what can happen, not just what’s planned or scripted.
- Recognize when a child is in “flow” and step back rather than interrupt.
- Minimize distractions and interruptions.
- Observe how children use time and adjust accordingly.
- Practice wait time—giving children time to come to their own understanding, which may take hours or days.
- Return to play opportunities, relaunching experiences as needed.

Note: Flow is a state where a child is so deeply involved in play that everything else fades away - they’re fully focused, absorbed, and enjoying what they’re doing. In this “flow state”, their mind, body, and curiosity work together, allowing deep learning to unfold through complete immersion.

Parent / Caregiver Role & Practice

Time

- Give your child time and space to explore deeply, repeat, and build on their play ideas at their own pace.
- Follow your child’s lead and notice when they are most focused or engaged in play.
- Encourage repetition and sustained attention as valuable parts of learning and development.
- Notice your child’s engagement and reflect together: “You spent a long time building that fort—what features were you figuring out?”
- Celebrate process over product, emphasizing the joy of exploration and discovery.
- When possible, revisit the museum or activity together to build on earlier ideas and experiences.
- Reflect with your child afterward: “I wonder what you’ll discover next time.”





WonderTrek Inquiry Process Guide

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GLOSSARY

Content – Children engage with content through direct experience and different ways of knowing, rather than through direct instruction.

Documentation – The gathering of information to both show what children’s play looks like and inform future Studio Explorations.

Environment: Context, Setting, and Place – The physical and social environment and its features are starting points for engagement, making connections, and discovery.

Group Reflection – A focused team conversation used to reflect on what was observed and determine possible next steps; combines interpretation and advancement.

Interactions and Relationships – Play and exploration are social experiences grounded in interactions and relationships with other children, adults, and objects and spaces.

Invitation to Explore – A thoughtfully arranged setup that sparks curiosity and encourages open-ended, child-directed engagement.

Loose Parts – Open-ended materials children can move, combine, and repurpose in endless ways to support creativity, experimentation, and flexible play.

Materials Engagement – Observing and exploring materials tells children about the world, how it works, how it is likely to work, and how they can engage with it.

Play Conditions – Environmental and relational features that support meaningful, child-led exploration (e.g., time, materials, relationships).

Strong Image of the Child – Grounds experiences and environments in a view of children as capable and competent learners as well as agents in their growth and learning.

Studio Explorations (SE) – Engaging experiences for children that are developed to tell us something about how children engage with materials and with other children; and how they explore, imagine, think, and have ideas.

Time – Time operates in many ways: as seasons, time of day, daily schedules, and personal clocks. Time is necessary for experimentation, repetition, and interaction.



Traces – Tangible evidence of children's ideas, such as photos, drawings, creations, video and other recordings of what children say and do.

WonderTrek Inquiry (WTI) – A collaborative question-driven, iterative process for the WonderTrek Children's Museum and its partners to explore, document, and share insights from children in play-based settings.

Working Question – An open-ended, observable question that guides each inquiry and focuses team observation and planning.

WTI Executive Summary – A concise overview that distills findings from an inquiry, often used to share insights with wider audiences or inform design decisions.

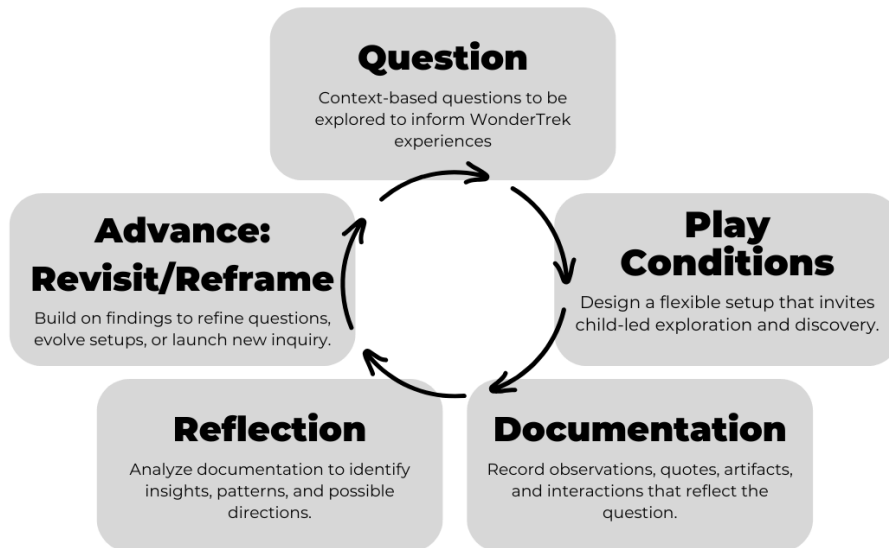
WTI Worksheet – A single planning and documentation tool that guides all steps of the WTI process—from question development through reflection and next steps.



Introduction

The WonderTrek Inquiry (WTI) process is a collaborative method for learning with and from children. It is used across WonderTrek programs, exhibits, partnerships, and planning efforts to better understand how children explore, express themselves, and construct meaning through play. While WTI is practical and usable in daily practice, it is also deeply philosophical. It is rooted in WonderTrek’s commitment to honoring the child as a capable, curious, and creative agent in the world.

WonderTrek Inquiry Process



WTI helps teams slow down, plan and observe with intention, and engage in reflection that informs future practice. It invites us to be flexible, responsive, and open—to let go of assumptions and allow children’s ideas and experiences to lead the way. The process works equally well in short, one-time settings and in long-form, multi-week investigations. In both cases, the structure helps ensure that decisions of facilitators, designers, playworkers, and educators are grounded in what children show us through their actions, words, and play.

WTI is not a standalone process—it is part of a larger framework of WonderTrek’s beliefs and practices. It is deeply connected to:

- **The Studio Explorations Framework**, which outlines WonderTrek’s approach to designing, facilitating, and reflecting on play-based learning experiences.
- **The Play Conditions**, which describe the environmental qualities—physical, social, and conceptual—that support meaningful, inquiry-driven play.



- **WonderTrek’s core values**, which guide all aspects of our work: *childhood, play, access and inclusion, community engagement, and relationships*.

These related frameworks ensure that WTI remains consistent with WonderTrek’s identity and goals. They also provide a strong foundation for developing shared language, aligning practices across teams, and supporting continuity between experiences.

WTI can support many different outcomes, including:

- Informing exhibit and program development and design.
- Guiding ongoing staff practice, reflection and planning.
- Creating opportunities for dialogue across roles and disciplines.
- Making children’s thinking and learning through play visible.
- Building relationships between children, caregivers, educators and facilitators.
- Contributing to WonderTrek’s long-term agenda for research and development.

As WonderTrek continues to grow, WTI provides a common thread—a way of working and wondering together. It strengthens our ability to respond to children with intention, build meaningful experiences, and continually learn from the families and communities we serve.

Working Question

The working question is the foundation of every WonderTrek Inquiry (WTI). It clarifies what WonderTrek is curious about, guides how we prepare the environment, and shapes what we observe and document. While WTI remains flexible and child-driven, a well-crafted question focuses our attention and supports meaningful, responsive facilitation.

Working questions are intentionally open-ended. They are not designed to be “answered” but to invite exploration, noticing, and reflection. Strong questions create space for children to engage in their own ways—through movement, language, construction, problem-solving, or storytelling—and for adults to interpret what those engagements might reveal. As questions are explored, insights and appreciations in children’s discoveries are revealed.



What Makes a Strong WTI Question?

A strong working question:

- **Aligns with WonderTrek’s long-term interests.** It helps build a growing body of insight and understanding about the children, families, and communities WonderTrek hopes to serve.
- **Elicits curiosity** – It reflects something the team genuinely wants to explore or better understand.
- **Is open-ended** – There is no single correct answer. Children can approach it in many different ways.
- **Is observable** – It leads to behavior, play, or interactions that adults can meaningfully document.
- **Connects to WonderTrek’s Play Conditions** – The question should inform the design of the environment and the invitation to explore.
- **Supports reflection and next steps** – It leads to interpretation and insight that inform future programming, design, or facilitation.

Examples of working questions:

- *What features of a space invite children to stay and explore?*
- *How do children interact with height, steps, or elevation?*
- *What happens when children encounter resistance in materials or design?*
- *How do children collaborate—or choose not to—during shared exploration?*
- *To see examples of completed inquiries in various settings, see Appendix B.*

The WTI Worksheet: A Unified Planning Tool

WonderTrek teams use a single WTI Worksheet (see appendix) to capture all steps of the process—from the question through documentation, reflection, and future planning. This worksheet is adaptable for a range of inquiry types. For example:

- Studio-based investigations, pilot testing for exhibits, and multi-day or multi-session inquiries. These often include layered investigations with questions that build upon each other based on the documentation, team debriefs, and more extensive interpretation.
- One-time events or short programs where turnaround is quick and team time is limited. The worksheet is shorter and focused on a single question that is explored with environment notes, observations, and takeaways.

Collaborative Question Development

The process always begins with question development, and working questions are best developed as a team.



The process might involve:

- Reviewing recent observations or themes from previous sessions.
- Identifying design goals or constraints that need exploration.
- Surfacing staff curiosities or unresolved tensions from past programs.
- Looking for patterns or repeated behaviors that suggest deeper inquiry.
- Exploring new ideas, practices, and/or audiences.

Questions may be drafted individually, but refining them as a group ensures a broader perspective, shared investment, and alignment across facilitators, observers, and planners. During planning, teams can also consider:

- How do the Play Conditions best support this question?
- How might children approach this question differently depending on age, interest, or previous experience?
- What kinds of documentation will best capture the nuances of this inquiry?

Revisiting and Refining Questions

Sometimes a question is refined after the first round of exploration. This is the strength of the WTI process, not a failure of the question. As the inquiry unfolds, new patterns may emerge that shift the team's understanding or suggest a new direction. The Revisit/Reframe step ensures that questions are never static; they evolve in response to children and staff's thinking and the insights gained through documentation and interpretation.

In WTI, the right question doesn't lead to an answer; it leads to deeper noticing, meaningful reflection, and more thoughtful design.

Play Conditions

Play is at the heart of WonderTrek's experiences—exhibits, programs, environment, and therefore, central to WTI. It is both the context and the method through which children explore, express themselves, and make sense of their world.

Play Conditions are the features of a setting that engage and respond to children's exploration, questions, and interests. They are evidence-based beliefs grounded in research, child development theory, museum best practices, and everyday wisdom. The following play conditions are central to how WTI experiences are prepared, facilitated, and reflected upon. Each one contributes to the quality of children's engagement and the insights that emerge through observation. These conditions are not static—they evolve with time, use, and reflection.



Together, they offer a flexible foundation that supports responsive teaching, planning, and collaboration across settings.

Strong Image of the Child

Everything in the WTI process begins with how we see children. We position children as active participants in meaning-making, capable of driving their own learning when the right conditions are in place. This foundational belief shapes how we prepare environments, offer materials, and engage in observation. Valuing children's ideas, questions, and strategies sets the stage for meaningful exploration and engagement. A strong image of the child invites us to notice children's capabilities, promote their agency, and reframe assumptions—seeing them not as empty vessels, but as researchers, creators, learners, and collaborators.

- Children are seen as capable and full of potential.
- Play affirms their autonomy and diverse ways of knowing.
- Adults observe with curiosity and respond with respect.
- Language, materials, and interactions reflect a positive, inclusive view of all children.

Environment: Context Setting, and Place

The environment plays a vital role in supporting exploration and shaping experiences. In WTI, the context is more than a backdrop—it's a co-creator in children's learning. Whether indoors or outdoors, in nature or a designed space, the setting is deliberately arranged to invite movement, focus, collaboration, and creativity. A flexible environment can shift and grow alongside the exploration it hosts.

Environment includes both the physical space and the lived experience within it—how it is arranged, interpreted, and used over time. This sense of place contributes to safety, belonging, and possibility.

- Dynamic, flexible environments adapt to children's needs.
- Spaces support both solitary and collaborative play.
- Sensory-rich settings encourage engagement and discovery.
- Design considers beauty, accessibility, and agency, from the child's perspective.

Invitation to Explore

Invitations to explore are the heart of WTI. These setups are intentionally designed to spark curiosity, invite open-ended exploration, and offer children the freedom to decide what to do, how to do it, and why.



Invitations are not instructions—they're provocations, shaped by children's interests and responses. Observing how children engage with these invitations is a core method for gathering data, refining inquiry questions, and shaping future experiences. They should feel intriguing, approachable, and open to multiple interpretations. Invitations can be visual, spatial, material, or social, and should evolve based on how children respond.

- Designed to spark curiosity and movement.
- Arranged to support varied entry points and types of engagement.
- Evolve in real time based on children's cues.
- Open-ended and child-directed.
- Children's behaviors guide adjustments and new directions.
- Avoid clutter, inaccessibility, or overly directive prompts.
- Welcome surprise, ambiguity, and the unknown.
- Reset or relaunch based on children's interests—not just repeating setups.

Materials Engagement

Materials are the language of play. In WTI, materials are selected and arranged not just for function, but for possibility. We aim to offer objects that children can transform, combine, repurpose, and use in unexpected ways.

Materials are chosen to align with emerging interests, challenge children's thinking, and expand their expressive range. Observing how children interact with materials builds understanding of how they are making meaning of their world. Materials should be real, accessible, and meaningful. They invite experimentation across sensory, emotional, and intellectual dimensions.

- Open-ended, varied, and thoughtfully chosen.
- Support physical, cognitive, social-emotional, and creative engagement.
- Encourage storytelling, construction, and experimentation.
- Creative use of materials, such as loose parts, signals exploration, imagination, and engagement.

Interactions and Relationships

Relationships shape the emotional landscape of play. In the WTI process, adults act as partners in exploration—participating directly at times, and at others learning through observation and thoughtful response. Relational dynamics offer valuable insights into children's social development, collaboration, and problem-solving. We emphasize respect, responsiveness, and co-discovery, while also designing experiences that invite peer interaction without forcing it. Interactions extend beyond people—they include relationships with materials, space, ideas, and time.



Play is both deeply social and highly individual.

- Rooted in respect, curiosity, and shared exploration.
- Peer collaboration is encouraged but not required.
- Adults model listening and non-intrusive engagement.
- Loose parts offer flexible, unscripted possibilities for expression.
- Setup and presentation influence engagement—consider arrangement, scale, and accessibility.
- Follow the child's lead and be a "guide from the side," scaffolding play
- Notice and build on group dynamics and natural collaborations.

Content

In WTI, content is not delivered—it emerges. Children's play reveals what matters to them: what they're curious about, what challenges they face, and what stories they want to tell.

Facilitators pay attention to the themes, concepts, and patterns that arise organically and use those to deepen the inquiry. This approach ensures that content is meaningful and personally relevant to the children involved. Children engage with content through all their senses and across disciplines—blending science, storytelling, movement, and imagination.

- Emerges from children's interests and actions.
- Grounded in real-world experiences and questions.
- Evolves as play unfolds and inquiry deepens.
- Content is discovered through process, not predetermined outcomes.
- Interdisciplinary thinking is honored and encouraged.

Time

Time is one of the most important—and often overlooked—conditions for meaningful play and exploration. In WTI, we prioritize uninterrupted, spacious timeframes so that children can fully immerse, disengage, and return again. Engagement is not linear; it requires patience, presence, and an openness to lingering in the unknown. Facilitators observe how children use time and adapt accordingly. Time activates all other conditions. Learning unfolds over hours, days, or weeks, and children need time to decide, repeat, and reflect.

- Ample, unhurried time supports deeper engagement.
- Flexible pacing allows for returning to ideas and materials.
- Observations consider natural rhythms and attention spans.
- Wait time is honored, allowing ideas to unfold gradually.
- Returning to previous work is encouraged as part of a long-term learning arc.



Documentation

Documentation is central to the WTI process. It's how evidence of children's thinking, curiosity, and exploration is gathered and reflected on. It is also how we learn to notice the nuance in children's movements, choices, language, and engagement and to treat those observations as valuable sources of insight.

In WonderTrek's approach, documentation is about capturing moments of meaning, often in real time, and later revisiting them to better understand what children were doing and thinking. It transforms experience into something that can be revisited, interpreted, and shared.

Purposes of Documentation in WTI:

- To make learning visible for children, families, and WonderTrek team members.
- To capture key moments, patterns, and surprises in children's play.
- To support collaborative interpretation and team reflection.
- To inform next steps, such as changes to the environment or framing of new questions.
- To contribute to WonderTrek's growing archive of research to inform practice.

To serve these purposes effectively, WTI relies on a range of documentation methods that are practical, adaptable, and responsive to the context of each exploration.

Methods of Documentation

Documentation can take many forms. The best methods are simple, flexible, and aligned with the setting and the question being explored.

Common tools include:

- **Written observations** – Short, objective notes recorded during or immediately after play, focusing on actions, language, and context (see appendix).
- **Photographs** – Still images that capture children's interactions with materials, environments, or one another.
- **Quotes** – Verbatim statements from children, recorded with attention to tone, emotion, and surrounding context.
- **Traces** – Artifacts generated by children, such as drawings, constructions, maps, or other creative expressions that reflect their thinking.
- **Video** – Short clips, when appropriate, that capture movement, interaction, or nonverbal expression in real time.



- **Interviews or conversations** – Informal or guided exchanges with children, caregivers, or facilitators that offer insight into intentions, reflections, or interpretations of the experience.

Documentation Protocol (see appendix) ensures consistency across all documentation collection and settings.

Best Practices:

- Record as close to the moment as possible—don't rely on memory alone.
- Be an objective observer, noting what you see without putting your opinion in the observation.
- Use neutral language. Avoid assumptions about feelings or intent unless the child communicates them.
- Label documentation clearly with date, location, observer name, and context.
- Include context or setup notes when reviewing photos or quotes later.

Documentation is most useful if it is used for reflection and interpretation.

Reflection

Once documentation is gathered, the WTI process shifts into reflection. This is the moment to step back, look closely, and ask: *What do we notice? What are we learning?* This is more than summarizing everything that happened—it's about identifying what stood out, what was surprising, and what ideas are worth carrying forward.

Reflection in WTI is collaborative. It benefits from multiple perspectives, including facilitators, observers, designers, and others who were involved. It creates space for interpretation—noticing patterns, surfacing tensions, and distilling themes that may not have been clear during the experience itself.

The Reflection Process Includes:

- Reviewing documentation together as a team (photos, quotes, notes, artifacts).
- Noting strong moments of engagement, repeated behaviors, or shifts in behavior.
- Surfacing surprises, tensions, or unexpected uses of materials or space.
- Drafting 3–5 key takeaways that summarize what was learned.

Takeaways should:

- Relate back to the original working question.
- Use specific examples from the documentation to support each insight.



- Be short and actionable statements—focused on what the team might build on, change, or explore next.

This step is most effective when it happens within a few days of the documented experience. The WTI Group Reflection Tool (see appendix) is a useful tool to organize findings in a clear, accessible way. These reflections can be archived, shared with others, or referenced in future planning.

Examples of Takeaways:

- Children worked independently at first but began collaborating once a shared story emerged around the materials.
- Large, low-to-the-ground materials supported risk-taking among younger children.
- Children returned to their original structures repeatedly, adding new details each time.
- Questions asked by adults often led to disengagement—children preferred uninterrupted exploration.

Reflection is not just a step in the process; it is a way to build a culture of shared learning. It helps us stay responsive, humble, and attentive to what children are showing us through play.

Advance: Revisit / Reframe

Reframe the inquiry, the next question, and/or experience. This final step is where the WTI process circles back on itself—not to repeat, but to deepen. Revisiting means reviewing everything that has surfaced during the inquiry: the original question, the children's engagement, the documentation collected, and the themes or patterns interpreted. Reframing is the intentional act of shifting focus, adapting the question, or imagining a next experience based on what has been learned.

This step acknowledges that children's play is not linear, and neither is our learning from it. The process of observing, interpreting, and advancing often reveals new directions—threads that weren't part of the original question, but are now more visible or too compelling to ignore. Reframing doesn't mean the original question was wrong; rather, it reflects how inquiry moves our thinking forward - fluid, layered, and responsive to what we've learned.

The process of Revisit / Reframe may include:

- Returning to the original question and asking: *Is it still relevant? Has it been explored fully, expanded, or shifted?*



- Reviewing the documentation with fresh eyes, especially after group interpretation.
- Identifying new or related questions that emerged from children’s play.
- Noting ideas that sparked strong engagement, repeated interest, or emotional investment.
- Considering which Play Conditions might need to shift in future setups (e.g., new materials, more time, smaller group sizes).
- Deciding whether to advance and adjust the same inquiry, launch a new one, or let a thread rest and return to it later.

This step is also a generative moment—it invites teams to co-create what comes next. Sometimes that’s a refined version of the current experience; sometimes it’s an entirely new provocation shaped by children’s unexpected thinking. Either way, this stage helps ensure that WonderTrek’s work continues to reflect what we are learning from children, rather than what we assumed in advance.

Ultimately, Revisit / Reframe keeps the process alive and our thinking open. It shifts our role from documenting what happened to planning what’s possible—grounded in experience, driven by children, and shaped by shared reflection.



APPENDIX B - WonderTrek Inquiry Process Resources

- Resource 1: Examples of Completed Inquiries in Various Settings
- Resource 2: WonderTrek Documentation Protocol Example
- Resource 3: WTI Observation Sheet Example
- Resource 4: WTI Group Reflection Tool
- Resource 5: WTI Worksheet

Completed examples of the above documents can be found in the Studio Explorations Framework (Revised May 2025)



Resource 1: Examples of Completed Inquiries in Various Settings

Inquiry Focus	Classroom-Based	Community-Based	Studio-Based
Studio Exploration Example	Pequot Lakes Preschool multi-week inquiry	HDT ECO Camp cohort, three-day inquiry	WonderTrek Play Lab. multi-session prototyping
Working Question	What materials encourage cooperative problem solving?	How do children investigate the nature of water?	What features of the climber support physical engagement, persistence, and creative movement strategies?
Invitation to Explore	-Designed to support cooperative play and problem-solving. -Materials rotated bi-weekly in a preschool classroom, e.g., foam blocks, loose parts.	-Minimal direction to support full experimentation. -Outdoor, open-ended setups at multiple sites using both natural and human-made materials, e.g., hoses, tarps, PVC, pumps.	-Offering opportunities to explore movement and modification. -Climbing prototype with varying layout and materials, e.g., blocks, lights, ropes, fabric.
Documentation	10-minute observations per material set, child quotes, and photos.	Written observations, child quotes, photos, and videos across all three sessions.	Photos, written observations, and informal interviews.
Reflection	Increased collaboration with open-ended, less familiar materials. Independent play made problem-solving less visible.	Children revisited and refined water systems, showing creativity and collaboration.	Children repeatedly tested limits and adjusted strategies, showing increased confidence, physical risk-taking, and spatial preferences.
Advancing Inquiry	Focus on identifying materials that foster collaborative problem-solving and deeper engagement over time.	Emphasize child-led use of mixed materials in nature-based settings. Reflections to inform exhibit design and programming related to water, play, and imaginative systems.	Inform structural refinements to climber design. Explore prompts that support more complex movement and creative challenges.



Resource 2: WonderTrek General Documentation Protocol

Purpose

This protocol establishes a structured approach for observing and documenting children's interactions, behaviors, and responses, whether on their own or with adults, during WonderTrek Inquiry activities. Observations will guide program and exhibit development by capturing how children engage with materials, spaces, and experiences.

Observer Roles & Responsibilities

- **Objective Observers:** Document children's actions, words, and interactions without making assumptions or interpretations.
 - Noted, “Two children took turns placing leaves in the wind tunnel and watched them spin,” without labeling the behavior as cooperative or scientific.
- **Facilitators of Curiosity:** Provide an engaging, open-ended environment for children’s exploration without directing their play.
 - Placed natural materials near a child-made water channel, prompting continued experimentation without giving direct instruction.
- **Collaborators in Analysis:** Contribute insights to reflection discussions that guide future inquiry-based learning opportunities.
 - Noticed that children were more interested in the shadows cast by structures than the structures themselves, so the team shifted the inquiry toward light and shadow exploration.

Documentation Methods

Observations are a key part of the WonderTrek Inquiry process, providing insight into how children think, interact, and engage with their environment. They should capture not only quotes and actions but also body language, facial expressions, and group dynamics to provide a rich picture of children's experiences. Whether observing from the side or engaging in conversation, the goal is to remain neutral and relaxed to ensure children feel comfortable and unpressured.

1. Written Observations

- Use structured Observation Sheets to capture:
 - *Engagement levels* based on established criteria.
 - *Interactions with materials* and peers.
 - *Quotes and dialogue* for insight into children’s thinking.
 - *Environmental influences* (e.g., weather, spatial constraints).



- *Other data* (e.g., movement patterns, social interactions, problem-solving strategies) specific to the inquiry will also be gathered.
- Ensure objectivity:
 - *Objective*: "The child balanced a triangle block on top of the structure."
 - *Subjective*: "The child built a castle with a window."

2. Digital Documentation

As appropriate, verbal permission from an accompanying adult should be obtained prior to recording children. The request for permission should include a brief explanation of what the recording will be used for. For example: "I'm taking short videos of children playing in this area as part of WonderTrek's ongoing work to develop and refine programming and exhibits."

- Video Recording (iPad)
 - Record play interactions, particularly dynamic moments where children engage deeply with materials.
 - Capture full-body movements, tool usage, and group interactions.
- Audio Recording (Voice Memos App)
 - Record children's dialogue when writing is impractical.
 - Capture explanations, storytelling, and problem-solving conversations.
- Photography (Camera or Camera App)
 - Take photos of children's creations and play environments.
 - If appropriate, encourage children to take their own photos of their work and record a short explanation.
 - If not appropriate, the observer should take the photo.

3. Interactive Documentation

- Conduct child-led interviews when appropriate:
 - Inquiry-specific interview questions will be provided in advance.
 - Outside of these questions, the rest of the conversation should remain open-ended and child-led, using open-ended questions such as:
 - "Tell me about what you made!"
 - "How does this work?"
 - "What do you want to do next?"
 - Record these explanations via audio or video.

Organization & Storage of Documentation

- Upload all digital files (photos, videos, audio recordings) to the designated observation or media folder within 48 hours of the event.
 - A link to the designated storage folder will be shared prior to the event and included in the calendar event for easy reference.



- Paper observation sheets will be collected by the lead or onsite supervisor at the end of the event and scanned for analysis and storage alongside the digital documentation.

Reflection & Use of Documentation

- Observers will participate in group reflection sessions with relevant teams, which may include:
 - Playworker Team
 - Specialty Team
 - Project Team
 - Design-Development Team
 - Other teams interested in reviewing findings
- Observations directly inform exhibit design, program development, and educational resources.
- They also support playworkers' ongoing learning and professional development, help generate new lines of inquiry, and foster open communication among team members about children's experiences and emerging needs.

Applying the Protocol in Practice

What to Look and Listen For

When observing, focus on actions, language, and engagement that relate to the working question. This may include:

- Repeated use of a material, space, or idea.
- Shifts in engagement (from tentative to confident, solo to collaborative).
- Physical gestures, expressions, or vocalizations that show problem-solving or curiosity.
- Moments of collaboration, conflict, negotiation, or invention.
- Use of language to explain, narrate, or test an idea.

How to Approach Documentation

- Position yourself nearby but not directly in the child's path of play.
- Avoid interrupting or asking guiding questions unless needed for safety or clarification.
- Use neutral body language—interested but not evaluative.
- Document what is seen and heard without interpretation.
- If a child engages with you, follow their lead and note the interaction in your observations.



What to Say if a Child or Caregiver Has Questions

If someone asks what you're doing:

- *"I'm part of the WonderTrek team and I'm taking notes so we can learn more about how kids play and explore. This helps us design even better experiences."*
- If taking photos or video:
"Sometimes we take photos or videos to help us remember and reflect on what we're seeing. We always ask first—would it be okay if I took a few pictures here?"

What to Do if Someone Declines

If a caregiver or child is not comfortable being observed, photographed, or recorded:

- Thank them and respect the boundary immediately.
- Do not include that child in any photos, videos, or notes.
- If possible, shift to another area of the space to continue documentation elsewhere.
- Make a note that permission was declined (without naming the child) for internal awareness.

What If...

- **A child asks to see what you wrote?**
Share it if appropriate—especially if it includes their words or ideas. This can build trust and engagement.
- **A child wants to help or be involved in the observation?**
Offer them a clipboard or ask if they want to draw or take notes with you. This can be a way to co-observe and honor their curiosity.
- **You're unsure whether to document a moment?**
If it connects to the question, shows strong engagement, or feels meaningful—capture it. If not, observe a bit longer before deciding.



Resource 4: WTI Group Reflection Tool

WTI Group Reflection
(LINE OF INQUIRY)
(DATE)

REVIEW

Clarify: What questions do you have about the Working Question or Play Conditions?

-

Observe: Describe key moments objectively.

-

INTERPRET

Identify: *What threads or patterns did you notice?*

-

Speculate: What might these clusters indicate?

-

Categorize: Organize by themes.

-

REFLECT

Advance: How can these insights be used going forward?

-

(DATE)_(INQUIRY)_WTI Group Reflection

1



Resource 5: WTI Worksheet

WTI Worksheet **(Date)** **(Studio Explorations Title)**

Question

Working Question: What questions are we exploring?

Importance: Why the question is significant?

Play Conditions

Setting, Timing & Environment: *Where and when will the exploration take place? How does the environment support comfort, curiosity, and time for deep engagement?*

Materials, Content & Engagement: *What materials will be offered, and how do they invite sensory-rich, creative, or real-world exploration?*

Setup & Invitation to Explore: *How will the space and materials be arranged to spark curiosity and support child-led discovery?*

Strong Image of the Child: *How does the design reflect a view of children as capable, curious, and full of potential?*

Interactions & Relationships: *How does the experience support connection between children, caregivers, and playworkers?*

Documentation

Methods: *How documentation will be gathered.*

Focus: *Key behaviors or interactions to watch for, relevant to the working question.*

Data Collectors: *Who will be gathering documentation?*

(DATE)_(INQUIRY)_WTI Worksheet

1



Summary and Reflection

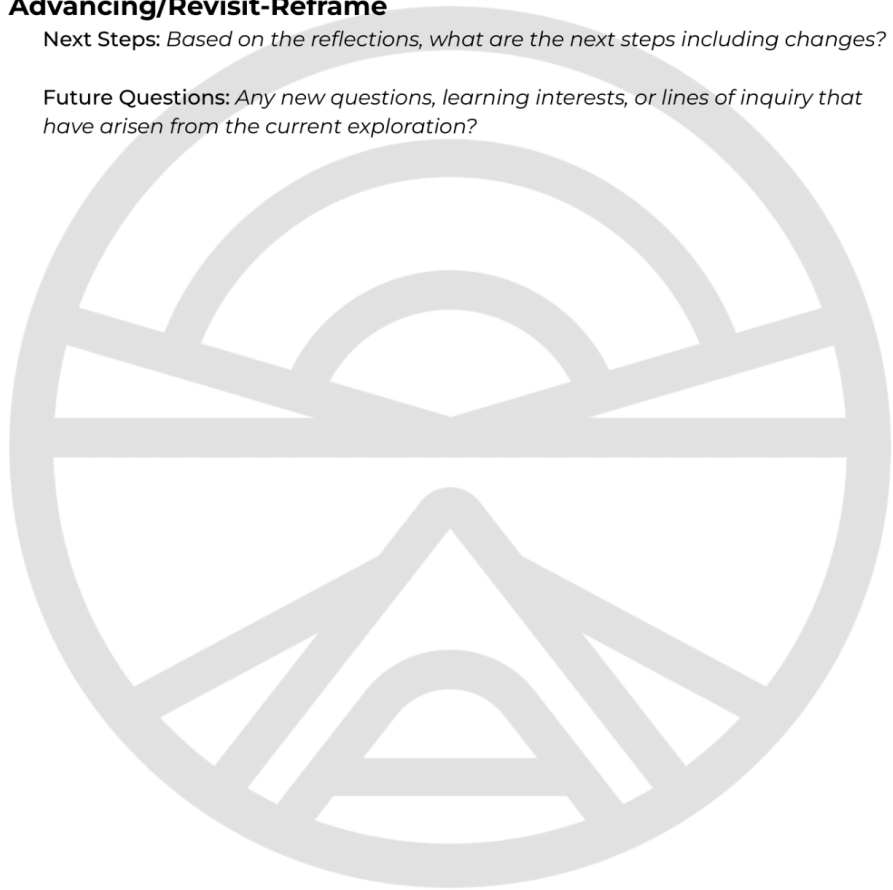
Key Observations: Summary of findings from the exploration.

Insights: Reflection on key insights, observations, and documentation.

Advancing/Revisit-Reframe

Next Steps: Based on the reflections, what are the next steps including changes?

Future Questions: Any new questions, learning interests, or lines of inquiry that have arisen from the current exploration?



WonderTrek Children’s Museum

Strategic Master Plan

Context and Purpose

The Museum Strategic Master Plan (MSMP) serves as WonderTrek’s foundational guiding document — the first comprehensive vision that shaped the museum’s mission, values, and purpose. It articulates WonderTrek’s commitment to creating environments where curiosity, creativity, and connection drive meaningful experiences for children and families. From this vision, subsequent guiding documents emerged, including the Play Lab Framework, Studio Explorations Framework, Play Conditions, and the WonderTrek Inquiry (WTI) Procedures, each expanding and refining how WonderTrek’s purpose is carried out in practice.

This plan, completed in September 2018, remains central to understanding WonderTrek’s origins, priorities, and growth trajectory. While newer frameworks expand on its ideas, the MSMP preserves the original philosophy, aspirations, and operational strategies that continue to inform WonderTrek’s evolution.

How It Connects to Other Guiding Documents

- **Play Lab Framework** – Translates the MSMP’s big-picture goals into WonderTrek’s physical and experiential design, defining how environments and interactions foster curiosity and collaboration.
- **Studio Explorations Framework** – Builds on the MSMP’s emphasis on inquiry and creativity through hands-on, iterative projects that invite children and adults to explore, play, and learn together.
- **Play Conditions** – Defines the environmental, relational, and material qualities that bring the MSMP’s play philosophy to life and ensure consistency across programs, exhibits, and experiences.
- **WonderTrek Inquiry (WTI) Process Guide**– Puts WonderTrek’s belief in the power of reflection and growth to create “a more vibrant and connected region” through ongoing observation, documentation, and learning from children’s exploration and play.

Document Notes

This document is preserved as part of WonderTrek’s historical record. Formatting has been standardized for usability, but all original content and intent remain unchanged.





WonderTrek Children's Museum Museum Strategic Master Plan

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Vergeront Museum Planning
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Jim Roe
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September 2018

*Strategic Master Plan document title changed from
Region 5 Children's Museum to
Wondertrek Children's Museum on May 7, 2024*

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Executive Summary & Planning Overview

Background

Because every community is different, the idea of bringing a children's museum to a community is sparked in many different ways. In 1899, the Brooklyn Children's Museum, the first children's museum in the world, was started by the Brooklyn Institute of Arts and Sciences as an alternative to existing museums. One hundred years later, a family's move from New Orleans, a city that had a children's museum, was the inspiration for opening a children's museum in La Crosse, Wisconsin. In Phoenix and many other cities, family friends shared stories of visiting a children's museum on their family vacations; conversations start and the question, "why not here?"

The idea of a children's museum for Region 5 in North Central Minnesota has grown from an article in the Minnesota Precision Manufacturers Association (MPMA) trade publication in 2015. The article described a maker program at the Children's Museum of Southern Minnesota (CMSM) in Mankato. Dr. Chad Coauette, President and CEO of Sourcewell in Staples, MN, came across the article. He, along with Paul Drange, Director of Regional Programs at Sourcewell, saw a connection with the many programs for children and youth offered in Region 5 that includes Cass, Crow Wing, Todd, Wadena, and Morrison Counties.

In late 2015, a group from Region 5 visited the Children's Museum in Mankato and met with the CMSM team. Impressed with the museum, its sense of place and offerings, Coauette and Drange contacted leaders in Region 5 to explore interest in the process and the potential of a children's museum for their area. A planning group started meeting in 2016. They also invited Peter Olson, Executive Director at Knock, Knock Children's Museum in Baton Rouge (LA) and former Executive Director at CMSM, to share insights into starting and opening a children's museum. During 2017, the planning group defined a broad vision for the museum, its focus, audience, and guiding principles.

To move the process forward, the group invited two Twin Cities area museum planners to facilitate a strategic master planning process. In early 2018 Jeanne Vergeront (Vergeront Museum Planning, Minneapolis) and Jim Roe (Jim Roe Museum Planning, St. Paul) engaged the planning team and community members in developing this plan.

This museum strategic master plan sets out the foundational ideas for planning and opening a museum. Starting with a vision, mission, and values and identifying the target audience, the plan summarizes relevant regional factors and influences that are likely to affect the museum. The plan also lays out a framework for the museum's learning focus and values, and exhibit concepts and program directions that will be at the heart of the museum experience. Finally the plan proposes broad criteria for the site and facility and a set of action steps for moving forward in the next phase.



Opportunity

The region, community, or city where a museum, or any organization, is located is more than an address or destination. It is the place, the people, the past, stories, and possibilities. It is the backdrop for and a starting point for understanding, planning, serving, and benefitting an area, its residents, businesses, and communities.

Located approximately three hours from the Twin Cities, Region 5 is one of 13 economic development regions in Minnesota. It is a rural and small-town area with deep pine forests in the north, rich farmland in the south, chains of lakes in the middle, and the Mississippi River running through it. The region's population of approximately 162,000 expands by approximately 300,000 tourists annually.

Region 5, like any other area, is characterized by both promise and challenge. Together these attributes inspire and shape the opportunity the children's museum intends to pursue in serving children, families, and community well.

- Over the last decade, regional population has grown and is expected to continue. Population is expected to grow about 8% and to be increasingly ethnically diverse.
- The region enjoys a diversifying economy. The Brainerd Lakes Area is viewed as being on the cusp of positive and transformative change with multiple development initiatives.
- Families are considered vital to the growth and development of the region—apparent in housing, employment, educational, and recreational strategies.

Along with indicators of population and economic growth, the region can expect some challenges.

While population is growing, it is uneven across the region; population is also older than the state average and is aging. Child poverty rates in the region are somewhat-to-significantly higher than statewide. The lakes, woodlands, and waterways of the region, critical assets to the local economy and quality of life, are also resources that are threatened. Visitors and permanent residents have access to a wide range of outdoor and recreational opportunities, yet there are relatively few out-of-school learning resources, especially during the area's long winters.

Covering a large geographic area, Region 5 holds diverse and varied landscapes, areas of wealth and poverty, urban and rural lifestyles, and a range of historical legacies. While these elements don't reveal a clear regional identity, there is evidence of certain social habits and values shared by many in the region, including: a love of the outdoors, being involved in civic life, cherished family traditions, and shared stories around events and locations. An understanding of these factors has guided WonderTrek Children's Museum in envisioning a dynamic community asset for the region's children and families.



Response

WonderTrek Children's Museum believes it can contribute to the vitality of the region by shining a bright light on children, their potential, and their role in strengthening community life.

The museum's strategic master plan positions the museum to take an active role around valuing children, childhood, and play. It describes a place-based, informal learning setting that engages children 12 years and under, their parents, caregivers, and teachers in making connections between ideas and actions, across systems, and with others. Its focus on children and families exploring and learning together, its understanding of the value of play, and its attention to 21st century skills come together in dynamic environments, experiences, and programs that are richly layered, locally relevant, and open onto the wider world. These hands-on, informal learning environments complement and support school priorities and goals and are a resource for professional development for teachers across the region.

As a year-round family destination, the museum will be a highly valued resource for local families in the winter as well as for visiting families in the summer. Long term, the museum will be an asset as the region works to attract young families to the area. With time, the museum can expect to be an anchor in the lives of children and families, deepen regional pride, and strengthen connections across the region.

Places To Go is the overarching theme for six indoor and outdoor exhibit areas. It invites children and adults to explore places in the museum, in the region, and in the world; and to see the next challenge and get to it.

- *At the Lake* focuses on what is fascinating about the area lakes—fishing, catching the big one, sitting on the dock, and exploring water's ways.
- *From the Garden* is the museum's food hub; food-growing activities connect with eating, cooking, and occasional community gatherings around food and nutrition.
- *Into the Woods* straddles inside and out and invites exploration of several woodland-themed areas nestled together, from forest to pastures and farm fields.
- *On the Road* provides the set-up for imaginative travels, where children find familiar place names and landmarks while discovering clues about faraway places.
- *Open for Possibilities* is a changing space for changing exhibits or community projects.
- *In the Great Outdoors* is the place for big messy activities that can't happen indoors; for a year-round greenhouse, seasonal gardening, and living ecosystems.

WonderTrek Children's Museum is on track to join a small but growing number of children's museums in smaller cities, serving rural areas, and spread across large geographic areas.



Strategic Framework, Audience, & Goals

Strategic Framework

In museums, the strategic framework is the vision, mission, and values that give meaningful direction to the museum about where it is headed and its enduring value.

Vision

A museum's vision is a compelling image of the positive changes it believes are possible for children and families in the region over the next generation. The children's museum's vision is:

WonderTrek Children's Museum and its partners envision a more vibrant and connected region because all children enjoy the supportive relationships, expanding opportunities, and wellbeing they need to thrive.

Mission

A museum's mission expresses the distinctive ways the museum can contribute to making this happen for the community and its children. The children's museum's mission is:

The children's museum brings together the region's children and families in shared experiences that are grounded locally and open onto the wider world. Dynamic, material-rich environments, exhibits, events, and programs engage children in the joy of play and the wonder of learning.

Values

Values are the timeless beliefs that guide the museum's decision-making and behavior and what it stands for. The children's museum believes and acts in accordance with these values:

- *Childhood* as a time of opportunity for all children to grow, learn, and thrive
- *Play* as a way of learning, interacting with others and improving children's health and wellbeing
- *Access and inclusion* to welcome, serve, and involve children and families of diverse backgrounds and abilities
- *Community engagement* to involve families, groups, and partners in the lives of all children
- *Relationships* that support children and youth, strengthen families, link generations, and connect the region
- *Place* as shared experience, a source of identity, pride, and inspiration



Audience

Because a museum exists to serve its audience, defining that audience is a critical, foundational decision. The process begins with understanding who the museum must serve in order to advance its vision and mission. Many characteristics of visitors such as age, visiting groups, interests, leisure choices, etc. are salient to how these groups will engage with the museum.

The children's museum welcomes people of all ages, backgrounds, and abilities living in or visiting Region 5. To achieve its mission, the children's museum must deliberately serve:

- Children 12 years and under with a high priority on children 2 through 6 years
- Multi-generational families and groups
- Early care and learning professionals, elementary and middle school educators

This audience is comprised of a Core Audience, a Secondary Audience, and an Emerging Audience group.

A *core audience* shares attributes with one another that are salient to what the museum offers that the audience wants and where a museum is outstanding. The children's museum's Core Audience is:

- Children 2 – 10 years
- Multi-aged and multi-generational families
- School groups
- *Living in Region 5*

A *secondary audience* shares attributes with one another that are relevant to what the museum offers. This group is less likely to have a high presence at the museum for various reasons: distance from the museum, more choices about how to spend time, etc. The children's museum's Secondary Audience is:

- Children, birth through 2 years
- Children and youth, 10 – 12 years
- Community and school groups
- Early care and learning professionals, elementary and middle school teachers
- *Visiting Region 5*

An *emerging audience* is not as likely to have a significant presence at the museum, at least initially. Serving this audience is strategically important—being useful to building community, extending regional reach, and cultivating relationships. The children's museum's Emerging Audience is:

- Youth 13 years and up in targeted experiences
- Low-income families
- Retirees
- Non-traditional museum audiences including the Leech Lake Band and the Amish
- *Living in counties surrounding Region 5*



Organizational Goals

Six areas indicate where the museum intends to channel its efforts and hold itself accountable. The children's museum will be:

- A consistently rich array of play and learning experiences and environments that strengthen connections to the region and create openings to the world beyond.
- An indispensable asset in the region for families of all backgrounds to meet and engage around common interests and priorities for their children.
- A recognized regional convener that advances the larger regional agenda around children and the challenges and opportunities they face.
- An organization that connects and helps grow regional assets; people, nature, business, agriculture, and the arts.
- A disciplined organization engaged in learning for itself, children and families, and the region.
- A sustainable organization that leverages regional assets, enjoys diverse support, and monitors selected measures.



Learning Experience Framework

A learning experience framework consolidates a museum's ideas about learning and learners and the ways in which it intends to deliver learning value for its visitors in its setting. This foundational set of ideas focuses and sets priorities and begins the process of translating its understanding of learning into museum experiences.

The framework is also a guide, a resource, and a tool. It informs exhibit and experience planning and communication about the museum's learning interests to partners and stakeholders. It serves as a guide in developing, assessing, and updating programs. And it is a resource for growing internal capacity, framing research questions, and enhancing its learning value for itself and the community.

Grounded in its vision, mission, and values, the framework is an expression of a museum's long-term learning interests and serves the entire museum.

A learning experience framework for a hands-on interactive museum for children and families is not explicitly tied to school curriculum or state standards. It is, however, full of learning that complements and supplements school priorities.

View of Learning

A shared view of learning guides the museum in creating and assessing experiences for its learners regardless of age or background. In developing its own exhibits, programs, and environments or in weighing opportunities with partners, the museum should be asking questions such as, *How is this experience directed by the learner? How are the learners' senses, previous experiences, and feelings engaged? What meaningful connections are learners inclined to make? What changes in understanding do we believe this experience encourages?*

Based on an understanding of learning and its own aspirations, the museum views learning as:

An active, lifelong process directed by the learner. Motivated by curiosity and interests, learning engages the senses, emotions, and mind. Learning takes place over time through interactions with others and the physical environment, builds on experience, and creates new meaning.

Key words and phrases in the above definition help shape the Learning Experience Framework, inform the museum's offerings, and build learning value: *active; lifelong process; learner directed; motivated; curiosity; interests; senses; emotions; mind; over time; interactions; experience; new meaning.*



Audience as Learners

Children's museums distinguish themselves from other museums by being *for* someone rather than *about* something, such as science, art, or history. They are for children and the people—parents, caregivers, friends, and educators—who care for and about them. Because children are born to learn—accomplishing great feats of learning very early in life—and because the museum believes learning occurs throughout life, it views its audience as learners.

The museum's audience is children 12 years and under, their parents, grandparents, caregivers, and educators living in and visiting the five-county region. This audience of children, youth, and adults share characteristics as learners that are salient to the museum's view of learning and to how it prepares and delivers learning experiences.

Although learners are diverse in many ways, learners young and experienced also share qualities with one another. Visiting the museum, exploring exhibits, meeting friends, participating in programs, are learners who are:

- *Social*, they engage with others, collaborate, help, and learn from and with them;
- *Active*, they touch, turn, lift, move, and carry, make choices, learn from climbing, crawling, and pushing;
- *Curious* and inquisitive, they ask questions, follow their interests, gather information, and seek answers.

Learners can also be tired or distracted, qualities that can interfere with learning and enjoyment. These can be managed and mitigated through architecture and way-finding, amenities such as seating and food service, exhibit maintenance routines, and staff preparation and customer service. These practices along with thoughtful consideration of these qualities of the learner help address the needs and expectations of the museum's learners in proactive, positive ways.

The museum recognizes adults as a valuable resource in serving all of its learners. Typically half of a children's museum's visitors are parents and caregivers. They are partners in play and learning with their children as well as a significant group of museum learners themselves.

Adults listen to children, answer their questions, connect a museum experience with a previous experience, share their knowledge, read text, extend a child's exploration, and follow up at home or at the library. Whether parents, grandparents, aunts, uncles, nannies, baby sitters, neighbors, daycare providers, camp counselors, scout leaders, field-trip chaperones, and teachers, adults are also learners themselves, learning about their child, learning about learning and learning about the Region's assets.



Learning Principles

With a long-term interest in children's thriving, the museum is intent on understanding how children grow, develop, and learn. Taking direction from its view of learning, the museum has identified a set of principles about learning in informal settings that are grounded in child development, learning theory, and research.

- *Children are active participants in their own learning, exploring the environment, learning to communicate, and building relationships.*¹³
- *Regardless of age or background, all children benefit from exposure to engaging and challenging experiences and places outside the home to be prepared for school and life.*¹⁴
- *Play contributes to the optimal development for all children and is essential to the cognitive, physical, social emotional well-being of children and youth.*¹⁵
- *Learning environments that draw on children's innate curiosity help a child learn through exploration and inquiry. A more diverse environment affords more diverse play and learning behaviors.*¹⁶
- *Children learn from direct experience with varied and real objects and materials. Children explore, manipulate, and elaborate using real objects in order to be able to engage in symbolic forms of learning such as reading and writing.*¹⁷
- *Relationships with adults who care about learning are essential to children's learning. Children learn in relationship with others, through conversation, interaction, sharing information, and finding out together with family and peers.*¹⁸

¹³ Gopnik, A., A. Meltzoff, and P. Kuhl. 1999. *The scientist in the crib: What early learning tells us about the mind.* New York: Harper Collins.

¹⁴ Copple, Carol and S. Bredekamp. 2009. *Developmentally appropriate practice in early childhood programs.* Washington, D.C., National Association for the Education of Young Children.

¹⁵ American Academy of Pediatrics. 2006. *The importance of play in promoting healthy child development and maintaining strong parent-child bonds.* Retrieved May 8, 2018, from: www.aap.org/pressroom/playFINAL.pdf

¹⁶ Alliance for Childhood, 2005. *A call to action on the education of young children.* Retrieved May 8, 2018 from: www.allianceforchildhood.net/pdf_files/background_paper.pdf

¹⁷ Paris, S. and S. Haggood, 2002. *Children learning with objects in informal learning environments.* In *Perspectives on object-centered learning in museums* edited by S. Paris. Mahwah, NJ: Lawrence Erlbaum Associates.

¹⁸ Vygotsky, L. 1978. *The role of play in development.* In *Mind in society: Development of higher psychological processes*, edited by M. Cole, V. John-Steiner, S. Scribner, and E. Souberman. Cambridge, MA: Harvard University Press.



Four Cs / 21st Century Skills

Four skill areas, also called 21st Century Skills, are of particular significance to the museum's view of learning. Relevant across settings, to play, now and in the future, these skills highlight the nature of learning that is valued by the museum. Process oriented, they recognize the individual as an active agent in learning and the social nature of learning. Each Skill is made up of several learning practices that are evident in the behaviors of children and adults, and can be supported by design, material, and facilitation decisions.

- *Critical Thinking*: Ask questions; gather more precise information; reason; link actions and effects; work out possible solutions; draw conclusions
- *Collaboration*: Assume roles; seek and share resources; take turns; agree to a goal; use others' suggestions; help others
- *Communication*: Listen; share ideas; give feedback; discuss; make a suggestion; tell a story; explain how something works
- *Creativity*: Imagine; generate ideas; try another approach; make unusual connections; use materials in new ways; apply information to new situations.

Essential Experiences

Children who thrive and feel successful across a range of life settings and situations benefit from a variety of experiences and interactions with peers and adults. For some children, these experiences provide the foundation for a good start in life. For other children, these experiences serve as protective factors against multiple challenges and risks. But all children, regardless of their age, ability, or background, benefit from engaging with new friends and supportive adults, in interesting spaces, and with activities, objects, materials and tools, exploring ideas and possibilities, their own and others'.

In developing, designing, and selecting exhibits, programs, activities, and environments, the museum intentionally incorporates building-block experiences into its exhibits, environments, and programs that foster:

- Feeling welcome and accepted
- Noticing, wondering, and exploring the world
- A growing sense of competence
- Supportive relationships
- Understanding feelings, ideas, and perspectives
- Being open to an expanding world

Essential Experiences, ones that all children should be able to enjoy, are listed below along with how they may be played out in the museum's exhibits, environments, and experiences.

When children *feel welcome and accepted* they:

- Feel recognized and valued for who they are;
- Enjoy support in new situations;



- Find attractive choices and accessible challenges;
- Succeed at an appropriate level;
- Experience the environment as safe and secure.

When children *notice, wonder, and explore the world* they:

- Engage with the world using all the senses;
- Are curious, ask questions, imagine;
- Investigate how something works and what it is made of;
- Use information-finding skills;
- Coordinate senses and actions to achieve a goal;
- Enjoy extended time playing and directing play.

When children *grow a sense of competence* they:

- Repeat and refine efforts for improved results;
- Try new tools and materials;
- Navigate novel situations successfully;
- Make choices and manage consequences;
- Assess abilities against risks;
- Fail safely and try again;
- Meet challenges and set new ones.

When children enjoy *supportive relationships* they:

- Have positive interactions with adults other than parents;
- Feel encouraged by adults to try something new;
- Observe adults reading, asking questions, and learning;
- Grow relationships and friendships;
- Share interests and ideas with others;
- Collaborate with peers and work as a team;
- Care about and help others.

When children *understand feelings, ideas, and perspectives* they:

- Express an idea, feeling, or an “ah-ha” moment;
- Listen to others with different views or ideas;
- Resolve conflicts with others;
- Express joy, delight, awe;
- Feel excited by discoveries;
- Recognize their *spark*.

When children are *open to an expanding world*, they:

- Draw on personal connections to their community;
- Connect with local cultural and seasonal traditions;
- Discover local-global connections;
- Deepen their regional roots;
- Manage uncertainty.



Experience Approaches

While valuing all of the Essential Experiences, the museum believes that it has a greater opportunity to advance some of these experiences for children, and their parents and caregivers. Five Experience Areas, drawn from across the Essential Experiences, resonate with the active, learner-directed, social, and meaning-making process that the museum values. These Approaches are where the museum intends to focus the opportunities it creates, build internal capacity, and distinguish itself from other organizations or agencies that serve a similar audience.

Important for the museum in its role on the regional learning landscape, the five Experiences Areas connect with STEM, Arts, Global Awareness, Literacy and Language, Early Childhood, and Well-being in the school curriculum. These areas also align with the 21st Century Skills described below. Finally, they point towards areas of impact where the museum hopes to make a difference.

- *Exploring Together*: Have, share, and test ideas; ask questions; build on others' ideas; explore alternatives; work together towards a common goal; talk about it: STEM, Literacy and Language
- *Get Moving*: Be active, play; climb, dance; use your body to move, explore, build, and understand; spatial reasoning; take a risk, meet a challenge: Well-being, Early Childhood
- *Making Meaningful Connections*: Link actions and effects; explore connections among objects, part-and-whole relationships; build ideas and understandings; make connections with people and ideas, across systems, the Region and the world: STEM, Cultural Awareness, Early Childhood
- *Imagining Something Different*: Imagine; try different roles; understand other's feelings; take another perspective: Cultural Awareness, STEM, Arts
- *Expressing Yourself*: Take a challenge, risk; try something new; look into the future; cultural and global connections: Arts, Language and Literacy, Cultural Awareness, Wellbeing

Engagement Strategies

In creating learning experiences, the museum uses approaches that are associated with exploration, learning, and discovery in informal learning settings—social, object centered, and active. These strategies support the museum's view of learning and are capable of engaging a wide range of audiences in varied ways and settings, from exhibits, to programs, to studio spaces, to mobile units.

- Play
- Conversation
- Materials Exploration
- Place-based Contexts
- Digital Media



Play offers opportunities for children to explore and use found objects, materials, and toys, transforming them with their imaginations. In play, children set physical challenges for themselves. They make up stories, games and rules, negotiating and problem solving about where the story will go, finding roles for new players, and adding ideas to a story.

Play:

- Takes many forms, dramatic and pretend play, constructive play, symbolic play, and games with rules;
- Engages people of all ages, all across the life span, from the solitary play of babies to the parallel and cooperative play among children, to competitive games and competitions;
- Allows children to learn something that is otherwise difficult to teach like cooperation, negotiation, risk taking; confidence; and
- Is supported by the design of spaces and places and the selection of materials that encourage, support, and extend the variety of play.

Conversation is both a process and a product, what a group talks about and what it is thinking about. Speaking and listening back-and-forth, with gestures and actions occur everyday in museums. Even babies' pointing and the directional gaze among group members is part of conversation. Sharing ideas and thinking together out loud with family, playmates, or facilitators, visitors make meaning of the experiences they bring with them and the ones they have at the museum.

Conversation:

- Is social, an exchange between people, that ebbs and flows, sometimes beginning prior to time at the museum and continuing afterwards;
- Can both satisfy curiosity and pique the interest of someone;
- Supports learning in a variety of ways, as talk-and-play, the foundation of literacy; and
- Is supported by the design of spaces, sound control, the choice of objects and materials, staff preparation, and engaging text.

Materials Exploration invites play and investigation of materials and the information they carry about the world, how it works, and how it is likely to work. Observing materials—clay, copper mesh, smooth stones, fabric—and exploring them through touch, sight, smell, and sound builds awareness, reveals their properties, and suggests how they can be used.

Materials Exploration:

- Invites questions, open-ended explorations and new understandings critical to innovation;
- Is inspired with more varied materials—natural, man-made, raw and open-ended, that change with use—inviting more varied explorations, uses, and discoveries;
- Is enriched with an abundance of a material extending exploration, suggesting new possibilities; and



- Is supported by the design of spaces—the presence of loose parts and open-ended materials, workspace surfaces, accessible storage, and available tools.

Place-based Contexts are starting points for engagement, making connections, and discovery. Places matter. Natural features, iconic elements, dramatic views, related activities, old stories, and recent memories build attachment to places. They are a source of pride, identity, and connection. In a museum, Place-based Contexts also inspire, support, and contain children's play, exploration, and conversation. Children make up their own stories, create adventures, and invent games in Place-based Contexts that are physical, sensory rich, and full of information and meaning.

Place-based Contexts:

- Cover a wide range of settings, ones that may be familiar or novel, real or imagined, natural or fantastic, miniature or gigantic;
- May be replicas or interpretations, one specific place, combinations of several places, created by an artist, or by many young artists;
- Can connect generations and cross geographies and time zones; and
- Are supported by the design of spaces, their features, materials, lighting, and mood.

Digital Media has a strong presence in the lives of children and adults. While it can distract from social and physical interactions, it also has great potential for creating context, extending experiences, and enhancing interactions. When digital interactions are highly integrated with a museum's built environment, the physical and the digital are blurred. Visitors can engage their senses, and technology can be a tool for creative exploration.

Digital Media:

- Can all but disappear, sparking a sense of surprise and wonder;
- Brings distant places closer and helps make diverse cultural experiences accessible;
- Can capture responses and serve as a record, allow learners to revisit moments, and share with others; and
- Is supported by the design of spaces and their features.

Learning Experience Platforms

Learning Experience Platforms are large-scale learning assets that advance the museum's long-term strategic and learning interests and distinguish it from other organizations. These resources allow the museum to be attractive to and serve a diverse audience, be sustainable, and have a meaningful impact on the Region's challenges and priorities.

While defined as separate platforms, distinctions between Learning Experience Platforms are not always marked. Platforms can overlap as they do when activity carts are used for a demonstration in an exhibit.



- *Exhibits and Environments*: Hands-on activity environments and experiences located both indoors and out including a changing gallery space that features temporary exhibits from other museums, showcases local projects, or presents an annual seasonal exhibit like Ice Shanties.
- *Programs and Events*: Facilitated experiences by staff and volunteers prepared to engage children and adults in active, hands-on exploration on a specific topic. Program formats vary to include drop-in programs, facilitated field trips, day camps, on site and in the community.
- *Studio/Maker Spaces*: High-facilitation and material-rich settings such as classrooms, multi-purpose space, and a maker space.
- *Parent and Caregiver Resource Hub*: Information on regional resources; digital museum guide
- *Mobile Unit*: A Play Mobile, Tech Mobile, or Story Mobile travels the region, reaching out to towns, schools, libraries, and parks across the Region, and gathering ideas or stories for exhibits and programs at the museum site.
- *Teachers' Center for Interactive Learning*: A multi-dimensional professional development resource offering workshops and training, hands-on learning materials, and classroom manipulatives serving teachers, early childhood through middle school from across the region.
- *Initiatives*: Long-term efforts focused on high profile issues and topics of interest that are delivered through exhibits and programs and often with partners.

Ways in which Learning Experience Platforms serve audience groups are highlighted below.

The museum engages learners who are <i>active, social, curious and inquisitive</i> in these groups...	... Through these Engagement Platforms ...
Children birth - 2 year (infants and toddlers) visiting with families and care groups	<ul style="list-style-type: none"> • Exhibits and Environments • Programs and Events
Children 2 - 5 years (preschoolers) visiting with families and in care groups	<ul style="list-style-type: none"> • Exhibits and Environments • Programs and Events
Children 5 - 8 years (kindergarteners – 2 nd graders) groups visiting with classes or at their schools	<ul style="list-style-type: none"> • Exhibits and Environments • Programs and Events • Studio/Maker Space • Mobile Unit
Children 8 - 10 years (2 nd – 4 th graders) in groups visiting with classes or at their schools	<ul style="list-style-type: none"> • Exhibits and Environments • Programs and Events • Studio/Maker Space • Mobile



Youth 10 - 12 years (5 th – 6 th graders) in groups visiting with classes or at their schools	<ul style="list-style-type: none"> • Programs and Events • Mobile Museum • Studio/Maker Space
Caregivers: Parents, grandparents	<ul style="list-style-type: none"> • Exhibits and Environments • Programs and Events • Parent and Caregiver Resource Hub
Family groups: Visiting together	<ul style="list-style-type: none"> • Exhibits and Environments • Programs and Events
Educators and Care Providers (infant through middle school) visiting the museum	<ul style="list-style-type: none"> • Programs and Events • Teachers' Center
Community members who can impact children's lives	<ul style="list-style-type: none"> • Programs and Events

Impact

A museum needs to do well for itself and for its community. The areas in which it hopes to make positive contributions to the lives of the children, families, and its community are where it must play an active and deliberate role, put resources, build expertise, and monitor its impact. The overlap of the five Experience Areas, 21st Century Skills, and Engagement Strategies are where the museum hopes to make positive contributions to the following groups over a period of approximately five-to-ten years after it opens. How these pieces work together along the lines of a logic model are included in the Appendix.

The process of developing and delivering exhibits and programs will enable the museum to identify indicators to track the results of its efforts along the way.

The museum intends to make a positive difference in Region 5 for:

- Children and Youth
- Families
- Educators and Care Providers
- The Museum
- The Region

Children and youth who are *thriving*:

- Are inspired and eager to play
- View themselves as competent thinkers and doers
- Enjoy strong bonds to parents and caring adults
- Feel a sense of optimism about the future and part of a larger world
- Enjoy new experiences and make new connections
- Experience improved wellbeing



Families that are *strong*:

- Connect to support networks and resources
- Recognize the family's role in supporting early experiences
- Have capacity to and interest in facilitating and extending a child's explorations
- Actively engage in varied activities, spend time together, and support their child's education
- Welcome new families, connect, and build relationships
- Experience reduced isolation

Educators and Care Providers who are *prepared and supported*:

- Build on children's strengths and capabilities
- Value play as a powerful source of learning
- Are prepared to teach a more diverse group of students
- View themselves as active learners
- Connect to other educators, care providers, professionals

A museum that is *community owned*:

- Enjoys participation and affiliation of residents from across the region
- Is recognized as a reliable resource on play and serving children and families
- Is positioned to help drive community-level change
- Has long-term partnerships that are diverse, innovative, and stable
- Builds public knowledge about children

A Region that is *connected across counties, cities, and towns*:

- Is viewed as a community center for collaboration around children
- Supports innovative, learning opportunities for children and youth
- Understands common grounds
- Celebrates shared regional commitments and distinct regional contributions
- Fosters a sense of connection to the region among its children



Experiences, Environments & Exhibits

Experience Theme: Places to Go

This overarching theme carries the intended spirit of the museum experience. It's about places to go in the museum, in the region, and in the world. It's also about seeing the next challenge and getting to it.

Experience Goals and Criteria

Guided by its view of learning as active and directed by the learner, the museum creates interactive environments, exhibits, and programs that invite the visitor, from the youngest to the oldest, to create and shape their experiences. In immersive settings indoors and out, rich with objects and materials, at engaging activities, children and adults explore, imagine, create, play, and connect. Experiences that involve doing, thinking, sensing, and feeling are guided by a set of experience goals. The museum's exhibits and environments are where visitors:

1. *Act on* the world around them; engage with responsive environments and materials and:
 - *Observe* materials, movement, and living creatures;
 - *Navigate* unfamiliar spaces and transform them into their own.
2. Are inspired to follow their curiosity and imagination, wonder "*what if?*", and:
 - *Take risks*—physical, social, and intellectual; set themselves up for challenges of their own making;
 - Make sense of *connections* around them; find out how one part relates to another.
3. *Work together* with friends, family, and people they don't yet know; help make something big that others can see and:
 - Discover what new things are possible by *sharing ideas*; and build on someone else's idea;
 - *Express* themselves in varied way—singing, drawing, moving, and acting.
4. Get refreshed, inspired, and engage the senses; *wake up* to and delight in the world around them and:
 - Feel the beauty and wonder of nature; call out its *qualities* and behaviors;
 - Feel the *wonder* of new perspectives and extraordinary views; feel elevated



Experience Criteria

While the museum's seven Learning Experience Platforms vary in how they engage visitors, they all express a set of shared criteria. Programs and Events, the Maker Studio, the Mobile Unit, and Exhibits and Environments share the following criteria.

- *Child directed* experiences allow the child agency and choice to follow interests, express preferences, pace themselves, and do "it" their way. Free play is child directed.
- *Open ended*, whether an activity, question, or object, allows for multiple pathways for exploring or understanding a myriad of uses and multiple outcomes.
- *Loose parts* are the moveable and found materials and objects that spark, enrich, and extend children's play. They include everything from sand and water to sticks, plastic crates and buckets, feathers, pinecones and seeds, hoses, and tubing. Loose parts have instrumentality and interact with other materials and media.
- *Local materials*, stones, logs, pinecones, and sand, are a familiar part of the local landscape, structures, and experience. They come from nearby although they may sometimes be used in unusual ways.
- *Challenge and risk*- engage visitors and invite them to stretch. Whether a challenge is physical, social, or cognitive, it is an opportunity to assess capabilities against what is new, uncertain, or demanding.
- *Connected play* flows from one activity to another in contrast to start-and-stop play. In connected play, an activity can be repeated, repeated with variation or with the player assuming a new role. One activity leads to another for sustained engagement.
- *Layering works* at every scale, from the background and context, to experiences and activities, to materials and objects, opportunities for social interaction and conversation, interpretive strategies, media, and labels.

Exhibit Descriptions

Of the seven Learning Experience Platforms identified for WonderTrek Children's Museum, Exhibits and Environments undoubtedly will play the greatest role in engaging visitors and delivering learning value for children, parents and caregivers, and educators.

In virtually every children's museum, exhibits and environments are at the heart of the experience it offers and what distinguishes it from other settings that serve children and families, from schools, to libraries, to parks and recreation. The concepts that shape exhibits shape the museum and its identity. Even when exhibits are refreshed and upgraded over the years, there is, inevitably, something in the first round of exhibits that is remembered, cherished, and serves younger siblings and visitors.

The following exhibit and program concepts were drawn from ideas and directions generated by the planning group.



They begin—from the inside out—to paint a picture of the future museum experience and will help guide further development and design of the facility. Currently, the concepts are organized around six focus areas. In some ways, these focus areas represent specific places within the museum.

In other ways, they will thread through many places and activities in the overall museum experience.

- *At the Lake*
- *From the Garden*
- *Into the Woods*
- *On the Road*
- *Open for Possibilities (Changing Exhibit Gallery)*
- *In the Great Outdoors*

At the Lake

Lakes are irresistible. We're drawn to their shores and delight in their sparkling reflections. They open up wide vistas—sometimes to the horizon—and reveal new mysteries from season to season. Whether fishing with grandma and grandpa or making sandcastles at the public beach, lakes are places for endless fun and exploration.

Lakes are part of the region's shared identity and pride. Not everyone has a lake to go to, but Kinder Lake at WonderTrek Children's Museum is a place for everyone—people and animals alike.

Nate's Bait Shop and Play Outfitter

Bait shops are filled with wonders, from live minnows and worms to fanciful lures and bobbers. Nate's is the place where all Children's Museum visitors go to get ready for a day on the Lake.

Giant Minnow Bucket.

There are some big minnow buckets out there, but this one is really big—almost eight feet across. Like the real thing, it's yellow and translucent, so lots of light gets in. Children can easily crawl into the bucket where lighting effects on the floor mimic sunlight through water. When they look up they'll see hundreds of scaled-up minnows schooling overhead, video of live minnows projected on a theatrical scrim.

Play Outfitters.

Every bait shop has a sales counter, where customers buy special supplies and a helpful outfitter passes on tips about where the fish are biting. Here's where museum visitors pick up everything they'll need at the lake: fishing poles, nets, life vests, stringer, binoculars, and more. Behind the counter is a map of Kinder Lake with images of different fish in various parts of the lake. The Play Outfitters will be a great place to just hangout and tell stories, especially for teen volunteer



Worm Farm.

Museum visitors can lift the lid on a bin full of organic matter and earthworms. There's a fun lesson here about what worms eat and what they poop.

Crazy Creature Lures.

Why buy a fishing lure when you can make your own? By clipping various materials onto a base, visitors work to make the best fish-tricking lures ever made. They can test their designs by trolling with them in a clear-sided tank with moving water.

Catch of the Day.

On one wall is a kind of community bulletin board, where visitors post their own fish pics. Bring in your "big catch" photos and post them for everyone to see.

Lake Shoes.

Here's where visitors find the right footwear for their lake adventure—from flip flops to big boots and waders.

Little Free Library.

On the way into Nate's, museum visitors can pick up a good book to read or a fish identification guide to browse through while sitting in the boat or at the end of the dock.



Water on the Move

Even in the stillest lake, water is always on the move. It splashes and swirls when fish jump, and waves at us with ripples and whitecaps. This long stream table mimics the flow of water through natural-looking channels where visitors can play with the current, make a flood, create rapids, and redirect the flow.

- At the end of the stream, where the water settles out into a pool, boat builders can try out ideas for new boat and pontoon designs.

Near the stream table, other water activities invite play with artful elements.

- Lights aimed upward through shallow pools of water reflect ripples on the ceiling above.
- Shallow tanks filled with soapy water are all it takes to get the bubbles rolling, rising, and popping. Hands, fingers, and handheld wands are the only tools needed to produce astonishing results.

Fishing Dock

A wood platform sits just high enough off the floor so that young children can sit with their legs dangling over the edge. The surface all around the dock is carpeted in the colors of water. A few lily pads are cut into the image. A background wall mural shows trees along the opposite shore. The dock forms a "T" to give plenty of room for people to fish or just sit and read a book. Underneath the dock, an otter sticks its head up just enough to be seen by curious lake explorers.



From the Garden

Gardens, fields, and orchards are food places—where people work with natural systems to grow good things to eat. These are great places to observe seasonal cycles, from spring sprouts and buds to autumn roots and seeds. And, there's always a long list of things to do, so anyone can pitch in and help grow some food and get it ready for eating.

This array of settings and activities are mostly based indoors, insuring a more easily managed, year-round offering. As architecture permits, access to an outdoor greenhouse could extend children's play with real plants, soil, and water well into winter. As a destination within the museum, The Garden can also function as a food hub, where food-growing activities connect with eating (snack time or school lunchtime), cooking, and possible community gatherings around food and nutrition. This is where you get to know your food before you eat it

From the Garden



Minnesota's Longest Picnic Table

Every day is a community picnic, where there's room for everyone and everyone is welcome. This might well be the longest picnic table in all of Minnesota. Some say it's where Paul Bunyan hosted the biggest picnic the north country ever saw. While this long table may or may not be the stuff of legend, it will surely get talked about in the years ahead. Visitors will get their first glimpse of the table while entering the museum. It will curve and wind its way through several areas, even into the Great Outdoors. It will be broken into segments to assure access and allow for the movement of people through the museum. While the idea of really long picnic table is fanciful, it's also very practical. Every exhibit area will benefit from a table and seating, for special programs, calm places to sit and color, impromptu family gatherings, school group lunches, and temporary displays. Most importantly, the longest picnic table will become the signature asset of the community, providing physical and symbolic connections between all of the food-related exhibits and programs at the museum.

- Seating can be made by regional artists and craftspeople
- Each segment could be adopted by communities across Region 5
- A place for serving real and pretend meals
- In places, visitors can find picnic baskets packed with plates, silverware, etc. for setting the table and hosting picnics. Who would you like to invite to your picnic dinner? The baskets could have different themes or include menus from the cultures highlighted in the Farmer's Market and Garden Plots.

Floating Farmer's Market

Climb aboard a farmer's pontoon that just came in from across the lake with baskets of reproduction fruits, vegetables, and prepared foods. Not only does this farmer have a big garden and orchard across the lake, she also harvests good things to eat from the woods and waterways around her farm. This unusual Farmer's Market will be a great conversation starter. This food comes from a farm across the lake and from nearby woods. But where does other food come from? The dock and the nearby picnic table children can also talk about what's good to eat, compare food sources, and look at different food traditions.

The main activities will be:

- Buying and selling produce,
- Serving food at the picnic table,
- Bringing in your "catch of the day" from the Lake.

Into the Woods

Woods are a familiar landscape for many of the region's children. Even if they don't live in a dense stand of tall trees, they have seen them all around in their daily travels. These familiar places, however, can hold surprising adventures and start some good conversations.



Several woodland-themed exhibit areas—each designed for particular kinds of activity and for specific audiences—are nestled together in a tall space, giving the illusion of depth and expansiveness. In a relatively small area, the woods will hold various layers of wildness and a visible transition from forest to pastures and farm fields.

Treehouse Forest

A series of trails starts on level pasturelands, like those in western Todd County, and winds up through a re-created woodland and into a pine forest, like those in northern Cass County. The trails are a combination of challenge course and three-dimensional, above-ground maze. Physical challenges start with ramps and clatter bridges, progressing to more thrilling experiences, such as walking across a rope bridge (netted) high above the ground or climbing into a lookout retreat. Spatial mapping skills will get a workout as climbers puzzle out crisscrossing routes through the trees.

- Treehouse structures will provide lookouts for wildlife.
- Adventurous climbers will eventually reach a window that looks out into a living pine forest on the other side of the glass, also with climbing trails and treehouses.
- A fire tower takes climbers up to an observation post just above the recreated forest canopy. From there, they use viewing tubes to spot birds in the treetops and storms approaching from the distance.

The Clearing

At the edge of the forest is a place where visitors can play with light coming through the trees, casting shadows from different kinds of trees and branches. This stage-like setting is outfitted with lights shining from all angles, mirrors to rotate at different angles to catch and bounce light, a few fans to move materials around in artful ways, and maybe a cloud or two that can be moved in front of the sun to cast fun shadows on the floor. This will be a rich setting for dramatic play with a few props such as scarves and fabric.

- On the trail leading up to the clearing is one of several Little Free Libraries visitors will find throughout the museum. This one holds books about plants, animals, and weather phenomena in the forest.

The HideAway

Tucked away at the edge of these woods is a special place for children four years and younger to play with and among animals living in the region—from the farm and in the wild—and with their parents and caregivers. Hills and hummocks, bridges and boardwalks, slides and stairs invite curious creepers and crawlers, cruisers and new walkers to move across the sculptural landscape where they discover and play with animals in their habitats.

The HideAway features:

- About 30 regional animals, both wild and domestic, large and small,
- Sculptural animals, some soft and cuddly, some not easy to find,
- Animals in their habitats, farm, woods, grasslands, aquatic,
- Sounds of places and animals at Listening Points throughout,



- Small versions of the animals, carved wooden and puppet versions, to clutch and carry,
- A Little Free Library with picture books about animals.

Into the Woods



On the Road

Hop in the car and before you know it, you're on the road. And since one road almost always leads to another, the possibilities for *places to go* are boundless. Young children start close to home when mapping out their worlds, adding bits and pieces of farther-away places over time. This group of experience platforms will provide the set up for imaginative travels, where children find familiar place names and landmarks while discovering clues about faraway places. Supporting programs will introduce museum visitors to diverse cultures—some close to home, others from around the world.

Packing Up

Sometimes the best parts of a trip are the surprises you find along the way. For this expedition, museum staff have packed up a few surprises for each visitor heading out into the world. On one side of a four-foot wall, visitors will find an assortment of carrying bags, from backpacks, to purses, baskets, and small suitcases hanging on pegs. They can grab one and start their journey, opening it along the way to find fun and useful gear to help in their travels. If visitors want to pack their own bag, they can head around to the other side where they'll find empty bags of various sorts along with a selection of exploration tools to pack up for their big adventure, including flashlights, measuring sticks, magnifying glasses, and more. A Little Free Library features books about places and people.

Are We There Yet?

This cluster of settings and activities is about places, where they are and how to get there. At its center is a highly stylized, room-sized, interactive map of Region 5 filled with landmarks and geographical features. It will be a multi-dimensional map, with vertical surfaces for images and activities.

- The map is comprised of several tabletops with openings in between and places where children can crawl under and pop up into the middle of a map.
- It will feature many ways to make tracks and get from here to there, piece together roads, railroads, and snowmobile trails between the places and landmarks of Region 5.
- The map will highlight diverse destinations in Region 5, such as Leech Lake Reservation, Camp Ripley, and Amish country.
- Visitors pick up and deliver letters to mailboxes throughout the exhibits (local addresses and foreign stamps), helping to make connections between places on and off the map.
- Seasonal questions prompt visitors to locate places on the map. What's the best place to see fall colors? Where's the best snowmobile trail? Water slide?

Open for Possibilities

Families who visit frequently are on the lookout for something new, and new offerings provide an impetus to step up marketing and raise the profile of the museum.



Having the space to host rental exhibits can be a challenge, since the museum may not want to schedule traveling exhibits back to back throughout the year. Rather than close the gallery doors between special exhibits, the museum could develop a set of events, programs, and exhibits that could be set up in the space for a few days up to six months. These offerings could be seasonal, such as a winter holiday exhibit, or based on activities developed from its own creative enterprise, such as In and Out of the Box (described in The Great Outdoors).

This 1,500 to 2,000 square-foot space will accommodate traveling exhibits designed for children's museums. It will be its own gallery, separated from the other exhibits and program areas and:

- Provide opportunities for change, attracting new audiences through time-limited offerings,
- Present traveling exhibits on subjects not featured in the museum's line-up,
- Present global cultures to local audiences with rentals from around the U.S.,
- Be a home base for exhibits produced by the museum

In the Great Outdoors

Being outdoors is a big part of life in Region 5. Sporting events bring people outdoors in all seasons, as do work and recreation. Families are quick to acknowledge the physical and health benefits of being outdoors too. It's while outdoors that the area's sense of place is best appreciated. Beyond the scenic beauty, the landscape abounds with evidence of people making their livings outdoors—in the woods, on the lakes, in the mines, and on the railroads.

This outdoor learning environment will be a place for big messy activities that can't happen indoors. It will also be the place for a year-round greenhouse, seasonal gardening, and living ecosystems, such as a small stand of white pine. This is where close observation is rewarded with surprising discoveries.

Greenhouse

This working greenhouse could be a separate structure completely outside the museum or a connecting space—part inside, part outside.

- It's a place where food is grown year-round.
- Facilitated activities will involve visitors in daily greenhouse activities, such as watering, pollinating, planting, and harvesting.
- An associated potting shed/bench indoors or outdoors will provide open-ended play with planting tools and materials.
- Year-round programs will show all the steps in food production, from planting to cooking.

Market Garden and Orchard

Every year visitors help plant a large garden that produces vegetables and fruits, supplying museum programs and the local food shelf.



The garden and orchard:

- Connects to the outdoor greenhouse and indoor food prep area for facilitated cooking programs,
- Has watering cans for dip-and-pour watering activities,
- Grows pick-and-taste fruits and herbs,
- Has live chickens in a chicken tractor, eating bugs and laying eggs,
- Grows edible native plants such as June berries and blueberries,
- Has a Mud Kitchen for making meals with real utensils, sand, and mud,
- Has raised beds and a tool shed for checking out tools for gardening activities and sand play.
- Garden plots planted by cultural groups in Region 5. Plantings can be identified in different languages and associated programs could be developed around seed packets with names of the plants, growing conditions, and dishes made with each fruit or vegetable. Visitors could design their own seed packets.
- Compares food traditions between different cultures. Programs could mirror the different cultural focuses that Sprout currently showcases monthly at their indoor marketplace, such as Ojibwe, Amish, Latino, Somali, etc..

Shipping Container

Everyday children see trucks and trains moving shipping containers. But while everyone knows what a shipping container is, not many people get to go inside one. The one that sits in the museum's Great Outdoors has been modified with a door and some openings for windows. It serves as three-season program space, quirky and curiosity inspiring. For much of the summer season, the shipping container could be home for In and Out of the Box, a creative and highly social activity that starts with boxes of every sort and where:

- Participants are challenged to build on different platforms at different scales,
- Box constructions are created with straws, taping, folding,
- Visitors name their box for its designed use: tackle box, tool box, lunch box, or music box
- Visitor-made box blocks become structures.

Mine Pit

Visitors follow a set of embedded train tracks from the backdoor of the museum down to a rocky-walled, gravel-filled place for digging where they find:

- Tools and equipment for digging and hauling,
- A real, big scoop shovel to sit in, bang on, or load with sand,
- Pea gravel to scoop onto a conveyor belt that empties into a right-sized rail car,
- A lever-operated railroad signal that says ready to go, stop, or dump the ore,
- A drive-up, stand-on scale for weighing loads according to orders placed by construction companies.



Programs Areas and Opportunities

Programs & Events, one of the museum's seven Learning Experience Platforms, plays an important role in creating a rich, dynamic experience for the museum's audience, children, newborns through 12 years, their parents, caregivers, and teachers.

These experiences facilitated by staff and volunteers who are prepared to engage children and adults in active programs bring people together, supplement exhibits, expand topics, highlight seasonal events, and connect with community partners. Highly interactive, program presenters engage learners. They listen and answer questions, follow interests, and share special materials, and tools. They highlight local partners, artists, and community interests.

Programs offer relatively flexible experiences in different formats and schedules and serve a number of functions for a museum. They add variety and choice to each visit; serve specific audience groups based on age or interest; and focus on topics of interest and deeper exploration of content. Program fees, when charged, contribute to a museum's earned revenue. They are generally a valued benefit for members.

Museum programs:

- Are a mix of both fee based and free with museum admission,
- Serve repeat visitors with fresh experiences from one visit to the next,
- Support play and learning for a range of audiences,
- Focus on content related to special interests and topics,
- Highlight "signature" programs that are distinct to the museum,
- Draw new audiences with large-scale events.

Offered at the museum and often in the community, program formats include drop-in activities and scheduled programs; one-time programs and a program series; monthly specials and annual events. Program topics are likely to include making and tinkering; gardening and cooking; engineering and robotics; backyard bugs and aquatic species; printing and dying with plants; music and movement.

The museum will offer programs for the audience groups listed below, introducing them based on interest, internal capacity, and available space.

- Families will be invited to family nights, holiday events, campfire programs, and autism-friendly times.
- School groups will visit the museum for field trips and participate in programs in schools.
- Infants, toddlers, and preschoolers may attend a weekly toddler time with their parents or grandparents. Their parents may attend programs for new parents.
- Children and youth can sign up for scout programs, studio programs, and day camps during school holidays in the school year and over the summer.



- Teachers and early childhood educators and caregivers can take workshops for professional development requirements, attend an annual open house, or take classes on active, hands-on learning
- Public programs invite the community to festivals, events, and concerts; to a summer picnic and a fall harvest festival, to celebrate Cinco de Mayo and Hmong New Year.

The museum may also be the location for programs offered by other organizations such as music and arts or teacher training. While not strictly programs, the museum also anticipates offering birthday parties, adult social events, and volunteer appreciation events.



Moving Forward

Sizing Up the Museum

Benchmarking Overview

As reflections of their communities, children's museums vary from one another in many ways: their community population, the audiences they serve, their particular focus, their exhibits and programs, their size, and type of building.

Yet, while each museum and community is distinct, there are also factors across museums that affect its long-term sustainability and affordability. Size, being the "right size" for the community, is one of these factors and can be understood in several ways: the size of its attendance, the physical size of the facility, and the amount of exhibit square footage. If a museum is too big for its annual attendance, it can be expensive to operate and feel empty for those who do visit. If a museum is too small, it can feel crowded for those who visit and discourage them from returning.

To determine a museum's size, museum planners look to other museums that share relevant similarities with that museum. These *comparable* museums typically have similar audiences, areas of focus, are located in communities with similar size populations, and, when possible, are located in the same, broad geographic region, e.g. the Upper Midwest.

The seven comparable museums selected for WonderTrek Children's Museum are listed below. Referred to as "benchmarks," these museums, mostly in Minnesota and Wisconsin, were selected because their area populations are comparable to the Brainerd-Baxter area; they describe themselves as regional; and they share similar climates. All but one, Fairbanks, AK, are located in the Upper Midwest. One museum, the Northwoods Children's Museum, is located in a vacation and retirement area around Eagle River, WI that shares similarities with the Brainerd Lakes and Region 5 area.

- Children's Discovery Museum, Grand Rapids, MN
- Duluth Children's Museum, Duluth, MN
- Central Wisconsin Children's Museum, Stevens Point, WI
- Children's Museum of Southern Minnesota, Mankato, MN
- Children's Museum of La Crosse, La Crosse, WI
- Northwoods Children's Museum, Eagle River, WI
- Fairbanks Children's Museum, Fairbanks, AK

Understandably, there are limitations in using data from benchmark museums that should be kept in mind when using this approach.

- Analyses of benchmark data lean heavily on medians (in some cases, averages); presumably a museum hopes to be above average.



- Data from benchmark analyses is based on past trends and is no guarantee of future performance.
- Standards for measuring space and attendance in museums do not exist.
- Museums build their museums—and detailed business plans—from the bottom up based on local specifics, staffing levels, etc.

Looking at Audience, Building Size, & Exhibit Space

A wide range of factors affects a museum's attendance—the number of people who visit the museum. Factors including the museum's location, visibility, and access to the site, parking and transportation, the size of the facility, the amount of space allocated to exhibits, and the quality of exhibits influence a museum's attendance.

In making attendance projections, a museum is also relying on a range of qualitative measures—How compelling is the experience? Are the exhibits high quality? How much is there to do? How fresh is the experience from one visit to the next? How well are the exhibits and facility maintained? How different is the experience from similar venues within the same driving radius. It is important to note that projected attendance should be reassessed if any of the variables—exhibit size, amenities, location, range and quality of offerings, etc.—changes during the course of planning.

Since no two museums are alike, and because standards for counting visitors have not yet been established, successfully projecting attendance can be very difficult. Typically, the process begins with two factors: 1) potential audience (market demographics); and 2) market capture rate (a measure of the drawing power of the museum).

Market demographics should take into account more than numbers of people in a defined geographical area. For instance, regional hubs tend to attract larger audiences than cities of similar sizes, and a larger tourist presence can also increase attendance at certain times of the year. Analysis of the museum's market area, the size and the mix of resident and visiting children and families, will likely be completed as part of the business plan. The market capture rate will be influenced the quality and scope of the museum. For instance, museums with large outdoor areas tend to draw more visitors than similar museums without that offering. Given these considerations, it is prudent to: A) use several metrics to build confidence in any single estimate; and, B) consider a numeric range for projected attendance, especially early in planning.

The purpose of this benchmarking analysis is to provide the planning committee for WonderTrek Children's Museum with the data it needs to make preliminary estimates of future attendance and determine the optimal size and scope for a new facility. As noted above, these two factors, size and attendance, are corollary; one influences the other.

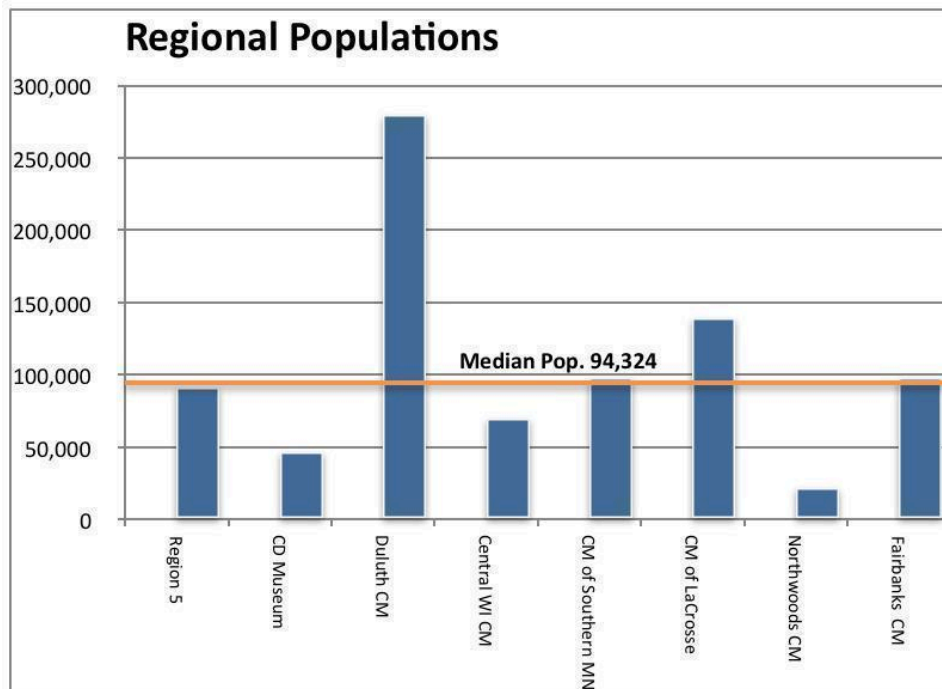


The data gathered from the benchmark museums (see Appendix)—critical for establishing preliminary ranges for attendance, building size, and exhibit square footage—include:

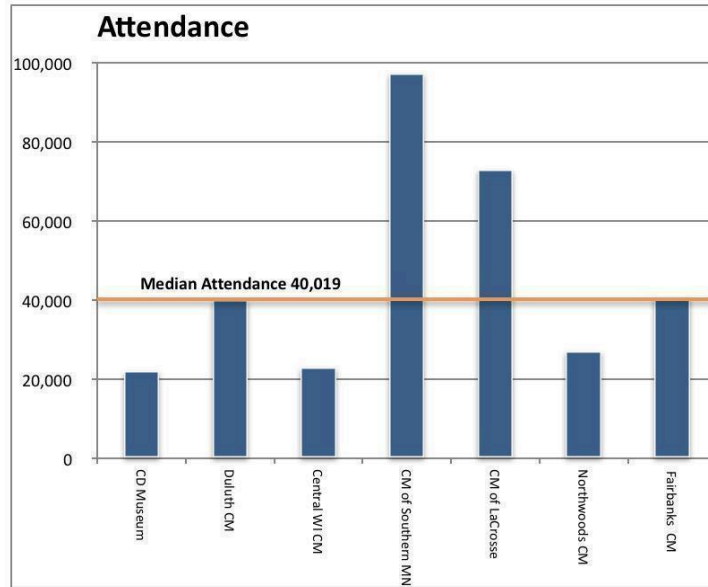
- Median attendance at similar museums;
- Median audience capture rates for museums in similar population areas; and
- Attendance related to gallery, or exhibit, size.

The following graphs illustrate the five sets of benchmark data used in this analysis. Given the small sample size and wide variances between benchmark museums, this analysis is reported in medians versus averages, to lessen the impact of statistical highs and lows within the set.

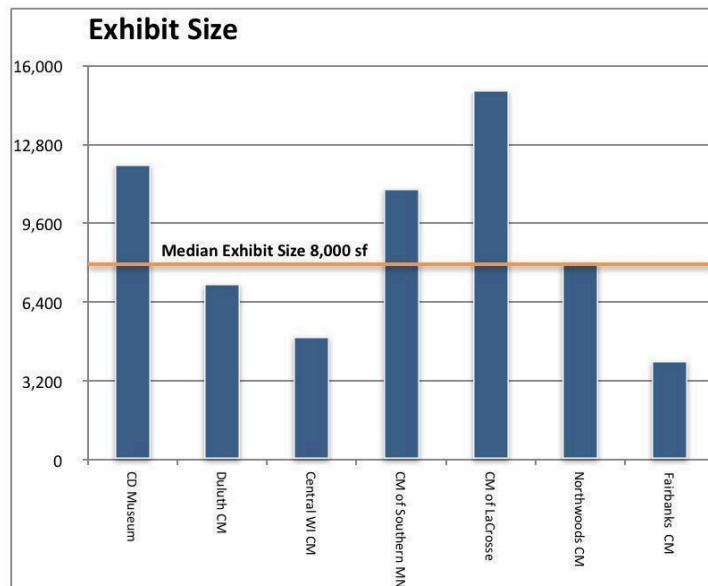
Where possible, this analysis has used reported *regional population* such as Metropolitan Statistical Area (MSA) and Micropolitan Statistical Area data to determine the market size for each museum. Where regional populations are less dense, potential audiences are likely to travel farther to attractions such as a children’s museum. Some of these communities also experience population increase during summer months, from tourists and lake-home residents.



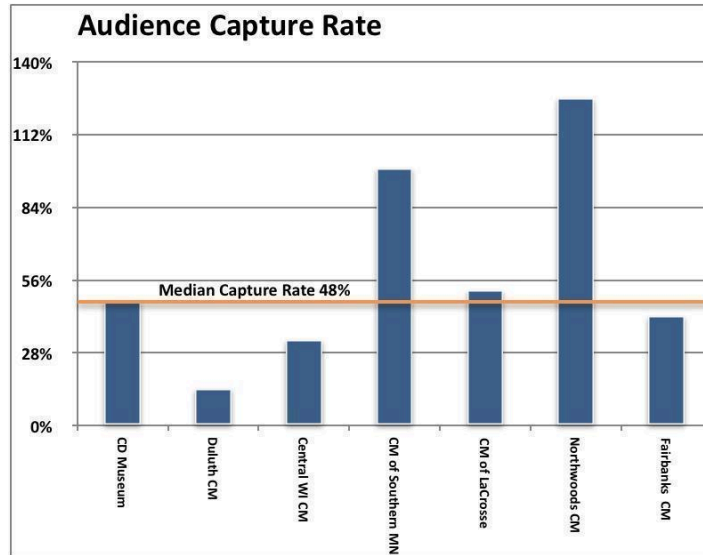
Museum attendance figures typically include every visitor coming through the door, whether it's their only visit that year or their fifth. While there are no industry standards for counting visitors, annual attendance remains an important measure of a museum's drawing power and success reaching its targeted audiences.



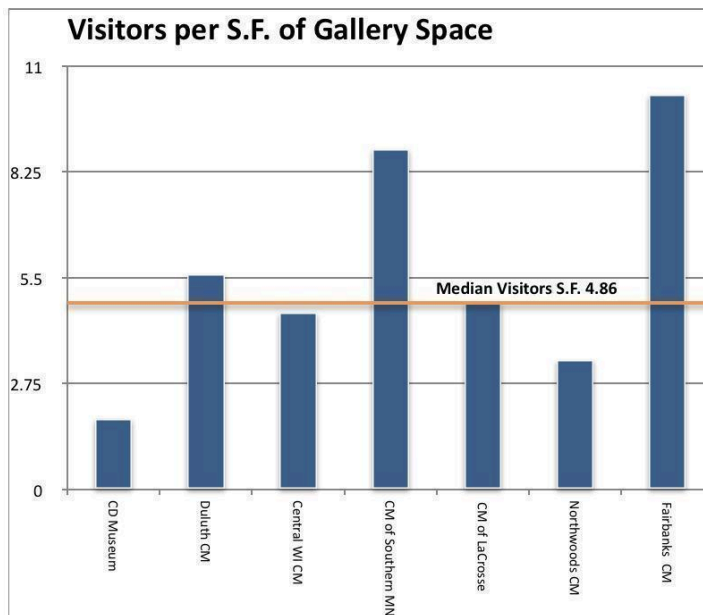
The amount of exhibit space dedicated to high quality exhibits is an important measure of what a museum has to offer its visitors. More exhibit offerings typically translate into more visits, and more visitors. Many children's museums settle into existing buildings and have to make do with very small or very large gallery spaces. The Children's Museum of La Crosse, for instance, is located in a former department store, with generous amounts of space for exhibits.



Audience capture rate reflects the percentage of the market (regional population) that visits a cultural attraction such as a children's museum in a year. Also called market penetration rate, this number is an important indicator of a museum's success in attracting audience. Where populations are large, or very dense, as in major cities, capture rates tend to be lower. Likewise, museums in low-density areas tend to have higher capture rates.



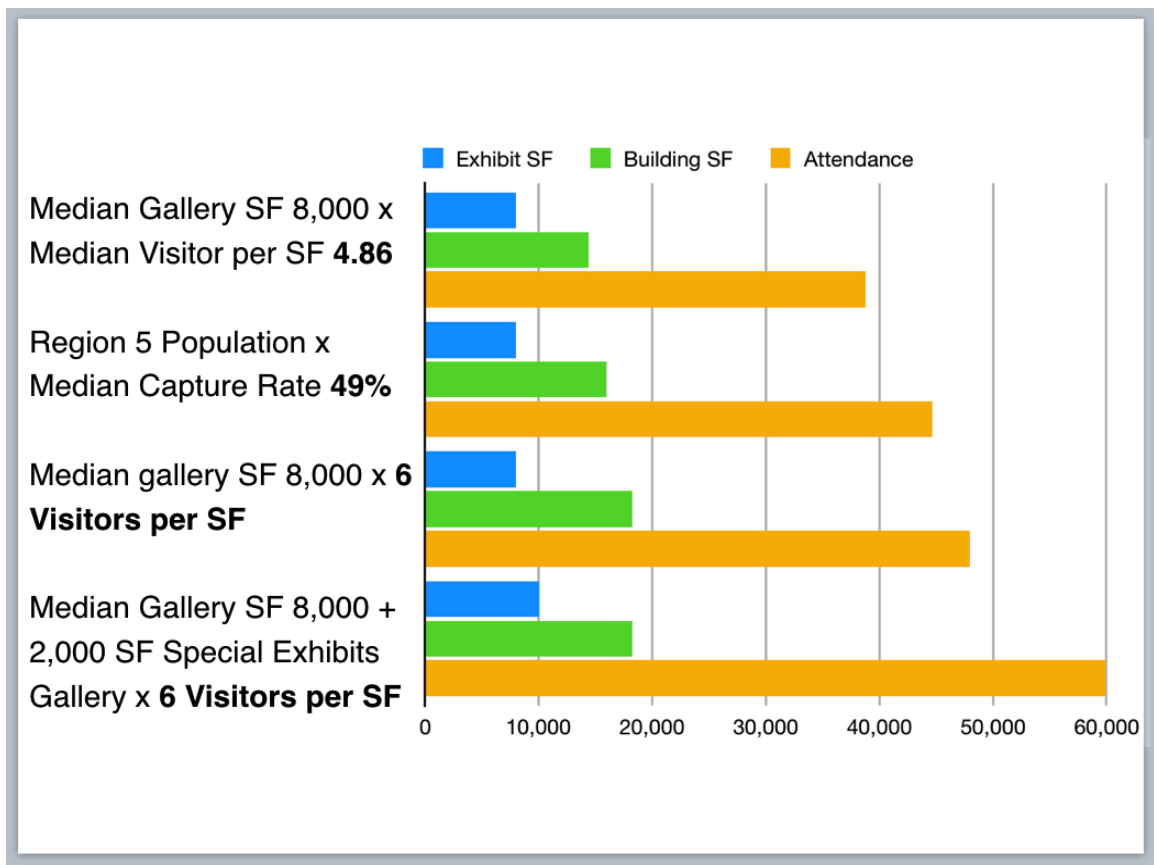
This number demonstrates a correlation between exhibit size and attendance. It is achieved by dividing annual attendance by the square feet of exhibits in a museum. Among the benchmark museums, this calculation results in a median of 4.86 *visitors per square foot* per year. The national average, across hundreds of museums, is six visitors per square foot, suggesting room to grow.



Implications for WonderTrek Children's Museum

The following summary graph presents four different calculations useful in projecting future attendance. They suggest a range from 38,000 to 60,000 visitors annually, based on exhibit sizes ranging from 8,000 to 10,000 square feet.

This somewhat wide range is typical at this early stage of planning and reflects many unknown factors, including location, exhibit size, quality of exhibits, and future leadership. As planning progresses, information about these factors will be brought into subsequent benchmarking studies.



The Museum Facility

Children's museums can be architecturally demanding, integrating design elements from schools, libraries, public parks, theaters, and even restaurants. A successful design process starts early and starts from the museum's core—audiences, experiences, and values. The following criteria, gathered from early planning discussions, lay out a set of visitor-experience expectations that will later inform site selection and architectural programming, when space needs, visitor flow, and facility functions are established and reconciled with the proposed budget. These forward-looking guidelines will help communicate the spirit and purpose specific to *this* children's museum throughout the design process.

Criteria to Guide Facility-wide Design

- *Carries the Mission*—It's a place that conveys values, says to children "this is for you and you are important."
- *Transparent*—It is readily legible by children and adults, instills navigational confidence.
- *Permeable*—Visitors move easily into, out of, and through the facility; program activities easily traverse the walls, outdoor light and atmosphere are felt indoors.
- *Connected*—It is home to multiple experience venues, purposefully juxtaposed and connected by various design elements.
- *Variety*—Architecture accommodates change from day to day, from season to season, from year to year.
- *Memorable Identity*—Whimsical features and curiously out-of-context elements give the museum some landmark characteristics that set it apart from other similar facilities.

Criteria to Guide the Design of Specific Areas

Arriving: Before the Front Door

When the children's museum first comes into view, everything children and families see will add to the sense of anticipation, whether visiting for the first time or returning to a favorite place.

The walk from the parking area up to the front door is interactive and highly experiential and may invite visitors to:

- Follow footprints;
- Walk along a creek;
- Touch and smell trees, shrubs, and flowers;
- Tap out a tune on a xylophone;
- Look through a kaleidoscope at a bed of flowers, an assortment of rocks, or a snowman.

Main Public Entrance: An Open Door to the Community

The architecture provides the set up for friendly encounters—inviting places to sit, a shelter, and points of interest to gather around.



In the constant flow of people arriving and leaving, children will see and meet people like—and not like—their own. Staff and volunteers come and go through the same doors as visitors. This area offers:

- A sense of arriving at a place with a singular identity, a place like no other;
- Dramatic architecture—drawing on color, shape, scale, movement, and light;
- Elements that engage the senses, the feel and smell of natural materials and plantings;
- Photo opportunities;
- Space for performers and performances;
- Different types of doors, big and small, a revolving door, an extraordinary door handle;
- Cultural artworks that welcome visitors.

School Group Entrance: Just as Fun as the Front Door

The museum will provide a separate entrance for school groups that accommodates different admission procedures than at the main entrance and ensures:

- A first-class entry experience for all students;
- A safe place for buses to drop off and pick up students away from traffic.

Admissions Area: Checking in and Getting Going

Visitors appreciate clear and loud cues about what to do next in a place where lots is going on. In addition to admissions, this area will have:

- Clear access to bathrooms;
- A place to hang up coats in cold weather;
- Something fun to do while waiting—water tiles, mirrors, finger mazes;
- An easy way to head outdoors in the summer;
- Orient visitors to what's ahead with images and views into the exhibits and program areas;
- Enough room so that “coming in” doesn't get confused with “going out.”

Places for Programs: Dynamic Variety

Facilitated activities can happen throughout the museum campus. Specific places, however, can easily be transformed into magnetic centers for activity. Certain factors will help this happen, such as:

- Children seeing something fun in all directions;
- Opportunities for large-scale activities requiring several hundred square feet;
- Program stages that facilitate a range of activities, from quiet to loud, from intimate to highly social;
- The addition of a few play elements transforming a space for 15 minutes;
- Integration with surrounding settings and exhibits.



Places for Exhibits, Settings, and Activities: Made for Children

While exhibit design is largely responsible for what makes an impression on visitors in the galleries, architecture plays a critical role in shaping spaces for playful exploration. Design objectives for exhibits include:

- Whimsy, imaginary places and settings;
- Unlikely combinations of objects;
- Children's art;
- Color, lighting, noise, sound, water, smell;
- Connectivity, connecting experiences in multiple directions.

Architecturally, certain elements promise to engage children in spaces:

- Tall ceilings provide a surprise, multiple levels indicate more places to go;
- Details in floors;
- Windows and light, through the walls and the roof;
- Spaces only young children can fit into, a door or short tunnel;
- Compelling sightlines, peek-throughs from one space to another;
- Varied openings to the outdoors.

Classrooms: Unpredictable Places

When children arrive from a school setting, they can expect learning environments that are museum like—open for the unexpected. Maybe these are called Exploration Labs and each one is different, with one functioning as a maker's space. Regardless of what they are called, these spaces are likely to be:

- Messy, as if Miss Frizzle were in charge, with pine needles and leaves strewn about the floor;
- Where furniture is varied and out of the ordinary, logs and stumps for sitting;
- Visually accessible and transparent into and out of, mirrors and peep holes;
- Adjacent to galleries;
- Outfitted for water activities.

Outdoors: Authentically Seasonal Experiences

The settings and activities outdoors are both a place to grow (nature) and a place to take off (industrial) with:

- Material choices important in the design;
- Relates to the region, reflects present and historical activities of the area;
- A camp fire now-and-then;
- Places for extraordinary events, even explosions;
- Change of seasons highlighted;
- Live animals;
- Ice carving, coloring;
- Shelter where needed to extend the experience in various weather conditions.



Places to Eat: Connecting Food, Community, and Learning

Settings for snack time and school lunch that:

- Are adjacent to exhibits;
- Are cool and funky;
- Offer the same kind of experiences that are happening everywhere else in the museum.

Criteria to Guide Site Selection

Location: Finding the Best Place for Region 5's Children's Museum

Planning work to date has not yet determined a location for the children's museum.

As that process unfolds, the following criteria will help guide in making choices.

- Recognized location, known to people in Region 5;
- Easy to get to, people can easily visualize a visit from anywhere in Region 5;
- Available parking and easy bus drop off;
- Space for outdoor learning environments;
- Convenient for visitors coming from the lakes;
- Contributes to the region's revitalization, a place where momentum is building, where there's synergy;
- Access to schools (Half of the region's students come from Crow Wing County and Pillager.)

Organizing to Move Ahead

There are many steps, milestones, and players in moving from the idea of starting a children's museum to opening the doors and serving the community. One version of these steps is covered in the Capital Project Phases and Milestones in the Appendix. Some steps are in the near distance and will only become apparent in a meaningful way with time and progress. There is also a set of action steps for the museum to initiate upon completing the strategic master planning process.

Action Steps

Complete the steps to establish the museum:

Filing articles of incorporation; applying for tax-exempt status and federal and state filing; forming a Board of Directors with by-laws; and begin board development.

Develop a well-reasoned business plan

Based on the museum strategic master plan and research on other museums.



A business plan puts numbers to the master plan, quantifying the project's building, exhibit, and campaign costs and predicting revenue from the capital campaign.

A business plan should also include an operating budget for the first five years with attendance projections and the cost of operating the museum and earned and contributed income. This is a plan that will need to be reviewed and updated during the course of the project as new information. Completion of the business plan should precede raising funds.

Start now to become a regional museum.

Region 5 may not currently have a clear identity among residents, visitors, and businesses in the five county area. Nevertheless, the museum's future success relies on being regional. Attendance must come from across the region. A case for financial support in grants and other appeals will be stronger with evidence of being regionally based. Finally, goodwill towards the museum from every corner of the region will be invaluable.

Developing a regional identity begins with a regional mindset

One that informs choices and decisions, and considers a regional perspective. The museum will convey an intention to be regional when it:

- Recruits board and committee members from across Region 5;
- Cultivates partnerships across all five counties, with the tribes, and Camp Ripley;
- Consider sites in all five counties in choosing a site for the museum;
- Selects a name that communicates a regional interest; and
- Finds opportunities to be visible in cities, towns, and schools across the region's five counties.

Launch a site search process:

Planning work to date has not yet determined a location for the children's museum. Selecting a site for a museum is always a major decision and with long-term implications. Location, size and characteristics of the site, and the facility itself, relate to and influence the museum's size, potential attendance, capital and operating costs. For a regionally based museum that intends to serve five large counties, site selection carries perhaps even greater significance than for most museums. Starting with a site-selection committee—and recognizing the importance of being a *regional* museum, the planning committee, or board, should consider the following criteria in its site search.

Site Selection Criteria

- Recognized location, known to people in Region 5
- Easy to get to, people can easily visualize a visit from anywhere in Region 5
- Available parking and easy bus drop off
- Space for outdoor learning environments
- Convenient for visitors coming from the lakes



- Contributes to the region's revitalization, a place where momentum is building, where there's synergy
- Access to schools (For instance, half of the region's students come from Crow Wing County and Pillager.)

Begin the serious and long-term work of community engagement around inclusion.

Since the earliest conversations about a children's museum for the region, the museum has expressed a strong interest in being inclusive: serving all children and being open onto the wider world. As noted in the *What We Heard Summary* (in the Appendix), Region 5 has not experienced the same influx of diverse ethnic groups that other parts of Minnesota have. At the same time, participants in community conversations expressed concern that "*children growing up in the region will be unprepared to work and live among people from diverse cultures.*" The Leech Lake and Mille Lacs Bands are valuable learning partners within the region. A few communities within the region are home to Latino and African families. Building on existing relationships with members of these groups, the museum should work towards forming a committee for community engagement around inclusion.

Grow public awareness across the region.

With the strategic master plan completed, the museum will have words and images to express what it believes a dynamic, play-based, family-centered experience can contribute to the region. The plan itself will convey the museum's commitment to planning and will serve as a likely tool for recruiting board members. Through informal and formal conversations with friends, supporters and potential partners, the museum can gauge interest and build support. These conversations will also serve as starting points for exploring how the museum can best engage children, families, and educators from across the five counties and work, over the next few years, with these understandings in mind. Together a well-worked community engagement plan and public awareness strategy will build towards a strong and warm reception and ongoing support when the museum opens.

I decided that we had to act like a museum from the very beginning. Rather than simply plan for a building that would be a decade away, we felt it was crucial to curate exhibitions, publish books, craft the virtual museum on line—in essence, to demonstrate the quality and creativity of our work to potential donors, collectors, members of Congress, and the Smithsonian.

Making a Way Out of No Way
Lonnie G. Bunch III
National Museum of African-American
History and Culture



APPENDIX C - WonderTrek Children's Museum Strategic Master Plan Resources

Participants: Planning Committee and Listening Sessions

Planning Committee

Kevin Donnay - Widseth, Smith, and Nolting, Partner
Paul Drange - Sourcewell, Director of Regional Programs
Nate Grotzke - Close-Converse, Broker
Sheila Haverkamp - Brainerd Lakes Economic Development Corporation, Executive Director
Staci Hedley - Region 5 Development Commission, Regional Development Planner
Dianne Heldman - Sourcewell, Administrative Support
Cheryal Hills - Region 5 Development Commission, Executive Director
Matt Killian - Brainerd Lakes Area Chamber of Commerce, Executive Director
Chris Lindstrom - Pequot Lake Schools, Superintendent
Megan Rehbein - Brainerd Lakes Economic Development Corporation, Office Administrator
Quinn Swanson - Happy Dancing Turtle, Sustainability and Stewardship Manager
Shannon Wheeler - Pequot Lakes Schools, ECFE

Listening Session Participants

March 27-28 2018

School Leaders

Rick Aulie – Pine River Backus Elementary, Principal
Kurt Becker - Crosby-Ironton, Elementary Principal
Brenda Benson - Literacy Coach, Crosby-Ironton
Vern Capelle - Upsala, Superintendent
Melissa Hesch - Pequot Lakes Elementary, Principal
Doug Jacobson - Tri-County Community Action, Executive Director
Chris Lindholm - Pequot Lakes, Superintendent
Mike Malmberg - Pillager Schools, Superintendent
Josh Smith - Pillager Elementary, Principal

Parents

Jeff Baillif jeff.baillif@essentiahealth.org
Toni Bieser tonib@hyteconstruction.com



Jessica Gangl jessica.bpsf@gmail.com
Gabe Johnson gabe@devinejohnson.com
Mary Devine Johnson info@visitbrainerd.com
Tim Nelson tim@lakehome.com
Kurt Porter kurt@seversonporter.com
Sarah Smith sarah@campconfidence.com

Early Childhood Educators

Tahnee Flowers - Brainerd Schools, ECFE Coordinator
Rebecca Jones - Little Falls School District, Early Childhood Teacher
April Kinney - Pequot Lakes, School Readiness, Teacher

Businesses

Mike Bjerkness - Brainerd Lakes Economic Development Corporation, Workforce Director
Steve Christenson - Ascensus, Executive Vice President
Mary Gottsch - Bridges, Director
Tom Haglin - LINDAR and Avantech , CEO
Sheila Haverkamp - Brainerd Lakes Economic Development Corporation, Executive Director
Char Kinzer - Crow Wing Power, PR Manager
Kevin Larson - Consolidated Telecommunications Company/CTC, Director of Public Affairs
Kristi Westbrook - Consolidated Telecommunications Company/CTC, CEO-General Manager

Hopes, Concerns and Expectations

February 28, 2018

What are your hopes, expectations, and concerns about the process of planning a children's museum?

- Hope the museum happens as soon as it's possible
- Concern: build on/continue on momentum
- Love the idea of a children's museum as a grandmother. What a children's museum could do for all children, in spending time outside the classroom. promise
- Tourism
- Conscious of the whole region
- Hope NJPA doesn't tire of the whole process
- Hope it's the best children's museum in the state, even nationally
- Children have big dreams for children
- Hope the process picks up steam
- We pull in the impacted and interested parties



- Concerns: we're volunteering our time
- Make sure the entire process is co-constructed with us. Use knowledge on the team.
- Don't replicate and redo work done. Process doesn't get in the way of progress.
- Plan-do-learn-adjust.
- Hope this is a magical place of learning for little children
- Facilitate as a place of coordination for the many things happening for middle school and high school kids.
- Don't want our mission to be fuzzied out by related goals.
- Hopes: a museum for all children that all children can go to. Give children a sense of worth and value.
- Hope it becomes a tourist destination. Attention contributes to revitalize the area.
- Will people step up financially?
- Hope we create a space that families can immerse themselves in play. Support for parents.
- Affordable, acceptable by all
- Family: the pressure on families. Encourage our youngest learners in a family setting.
- Momentum; must be regional. Build on momentum in Brainerd-Baxter area.
- Concern about financial resources to make it happen
- Hope it's a creative, inspirational, fun space. Blow-out the walls, expectations for kids and environments
- Pay attention to the environment: space, materials, topics
- Mission: stay tight to kids. Be regional. Be mindful of including other voices.
- Hope our children's museum has a seasonal side...non-summer time
- NJPA and Chamber have great reputations. People will want to piggy back onto the project to make their project happen.

Hopes, Expectations, and Concerns

- Make it fun, magical, and inspiring; a place where children feel valued
- Keep the focus on the children and families of Region 5; make it affordable, accessible, and relevant
- Make it a museum for all; a place for the region's families and an attractive destination for visitors
- Keep it regional; plan with the region to be for the whole region
- Conduct an inclusive and reflective process; "Plan-Do-Learn-Adjust"
- Draw on the planning group's knowledge and reputation; be mindful of their time and talents
- Don't lose the momentum; leverage the current sense of urgency
- Stay focused on the mission; don't be pulled off course



- Keep an eye on funding; will contributors step up when called upon?

Regional Backdrop

March 2018

Population

- A) Region 5 has been growing over the last decade and growth is expected to continue. Growth has been uneven across the Region, from a small population loss in Todd, to a small increase in Wadena, more than 14% in Crow Wing. Covering a large geographic area, the Region has a wide range in population density. (2017 Regional Profile)
- B) Regionally, population swells seasonally to more than 300,000 in the summer months with families, retirees, from the region, Minnesota and beyond. (News OK)
- C) The Leech Lake Band of Ojibwe, a band of the Minnesota Chippewa Tribe, has an enrollment of 9509 members. (Leech Lake Band of Ojibwe)
- The Region anticipates changes in its population: about 8% population growth, increasing ethnic diversity, and an aging population. (Resilient Region)
 - Ethnic diversity will grow and expand from existing clusters associated with food processing jobs. (Resilient Region)
 - Long term (2040), population increases are expected in the 25-34 and 35-44 age range. (2017 Regional Profile)
 - The Region's population is significantly older than statewide: 20.1% of the population compared to 13.9%. (CREDS)

How can a children's museum help attract more young families to the area and encourage young families to stay in the area?

How can a children's museum be welcoming to an increasingly diverse population?

How can a children's museum build on the advantages of a greater presence of older adults in the area?

Children & Families

- A) Families are vital to the growth and development of the region, which is apparent in housing strategies, goals to improved livelihoods, recreational activities, and parent involvement in child's education. (Multiple sources)
- B) At the same time, families face challenges: 10% are considered food insecure and the five counties fall in the lower third of Minnesota's counties for overall health. (Growing Food Connections)



- 2014 child poverty rates range from 11.8% (Crow Wing) to 17% (Cass and Wadena) compared to 11.5% statewide. Between 40 and 60% of children K-12 schools are eligible for free and reduced lunch. (MDH; Resilient Region)
- Childcare in Greater MN is a challenge (cost, location, hours) especially for low-income families, single-parent families, and families with infants and children with special needs. Even when childcare is available, quality childcare is a persistent challenge. As employers struggle to find employees and raise wages, providers leave childcare. (Initiative Foundation)
- Initiatives, projects, and services for young children exist (early ed scholarships, Pierz playground, Sensory Room in Upsala) but a systemic approach to serving young children and valuing childhood isn't apparent. (Multiple sources)

In what ways can parents connecting with other parents around their children help build social capital—shared experiences, connections to place, connections among citizens.

How can the region take a more active role around valuing children, childhood, and play?

Are there ways in which a children's museum might contribute to improvements in children's wellbeing?

How can the Good Life start with children and childhood?

Learning & Education

- A) Serving students from pre-K to post secondary, the region's educational landscape spans five counties, with 24 school districts, private schools, two community-technical colleges, and Leech Lake Tribal College. (Multiple sources)
- B) The area's plan documents, programs, and initiatives reflect active support of K-12 education geared towards recruitment, support, training, and recognition of educators; student enrichment across literacy, arts, and STEM; career and college readiness; and post secondary transitions. (NJPA)
- For Region 5, the 2013 high school graduation rates were 81%, somewhat higher than the 79% statewide average while the percent of adults 18 and over with a college degree (30%) is lower compared with adults statewide (41.2%). (NJPA; MN Dept. of Ed; 2017 Regional Profile)
 - Priorities highlighted in regional plans align with the informal learning approach of a hands-on museum: lifelong learning; early childhood education; STEM; place-based arts; activity-based; parent engagement in their child's learning. (Resilient Region; Pequot Lakes Schools Strategic Roadmap)



- ECFE, Pre-K, and 500 early childhood scholarships are helping to strengthen the early learning landscape. The Leech Lake Band of Ojibwe operates several early childhood programs, Bug-O-Nay-Ge-Shig School (K-12) providing an indigenous approach to education. (Multiple sources; Leech Lake Band of Ojibwe)

To what extent could hands-on, open-ended experiences for young children, their parents and caregivers, and youth contribute to a regional culture of lifelong learning?

How could a children's museum help make the critical role of early experience—learning, play, attachment—visible to families, educators, and decision makers?

How could an informal learning environment, like a hands-on museum, complement and support school priorities and goals?

Planning & Economic Development

A) Robust and inclusive planning at the county and regional levels provides Region 5 with a dynamic base for future growth and development. In particular, *Resilient Region* sets the stage for well-informed growth and development into the future.

B) The Region enjoys a diversifying economy that includes health care, tourism, agriculture, manufacturing, government, many non-profit organizations, and an emerging local-foods movement.

- The Brainerd Lakes Area is on the cusp of positive and transformative change, including redevelopment of the Potlatch/Wausau mill, the River to Rail initiative; and a referendum on a new performing arts center. (Multiple sources)
- Given its location, the Brainerd-Baxter area functions as a regional hub, serving as a gateway to the area.
- Historically, railroads have played a significant role in the region's development—as a one-time headquarters and later repair shop for the Northern Pacific—and by the Mississippi River crossing at Brainerd. Currently, BNSF maintains an active line through the region, provides employment opportunities, and helps sustain an important iconic element of the region's sense of place.
- High-speed internet access for households was 40% (2011) with a goal of 95% (no date given). (Resilient Region)
- The partnerships and collaborations that have emerged from regional and county planning have the potential to invigorate new community networks and initiatives. (Resilient Region, River-to-Rail initiative, CREDS, NJPA, county comprehensive plans)

How can the high standards for regional planning also serve as a guideposts for community engagement and inclusive practices for a children's museum?



In what ways can a public place that is open and welcoming to all also be a place where economic disparities among children recede?

How can the wellbeing of children and childhood become a measure of economic vitality?

Natural Resources & The Environment

- A) The lakes, woodlands, and waterways of the Region are critical assets to the local economy and quality of life. At the same time, those resources are threatened.
- B) Visitors and permanent and seasonal residents have access to a wide range of outdoor recreational opportunities including state and local parks, trails for hiking and biking, water trails, and the Chippewa National Forest.
- The particular mix of wetlands, lakes, rivers, streams, woodlands, and fertile agricultural lands contribute significantly to the Region's memorable sense of place.
 - A southwest to northeast transect through Region 5 reveals a brief transition from upland prairie to northern hardwood forest to a mixed hardwood and coniferous forest.
 - Only small portions of Region 5 are represented by established watershed organizations. (Minnesota Association of Watershed Districts)
 - About 75% of the Leech Lake Reservation is in the Chippewa National Forest. (Leech Lake Band of Ojibwe)
 - More than 200 bodies of water (ditches to lakes) in Region 5 are defined by the Minnesota Pollution Control Agency as impaired (water quality). (Minnesota's Impaired Waters List)
 - Growth and development in parts of the region pose challenges to the natural resources that make the area attractive and contribute to quality of life.

How can the children's museum support families in strengthening children's sense of place in the region?

Given what we know about how time in nature contributes to children's wellbeing, how might the children's museum help children spend more time in nature?

How can the children's museum expand ways children experience nature and the outdoors?

Arts & Culture

- A) Arts and culture, like the region's outdoor recreational opportunities, drive tourism and contribute to the area's quality of life; they attract people to the area and help keep them here.
- B) Region 5 communities have access to, and are well supported by, many established arts organizations, from local groups to the Five Wings Arts Council.



- Region 5 is ninth in population but ranks third in creative worker density in the workforce. (Creative Minnesota)
- The region's cultural-events calendar is heavily booked with a diverse range of fairs and festivals, music performances, outdoor recreation, and motor sports. (Explore Minnesota)
- The most active centers for arts and culture include Brainerd, Little Falls, Pine River, Wadena, and Walker. (Explore Minnesota, Region 5 arts organizations)
- Communities throughout Region 5 have drawn on historical themes (fur trade, railroads, lumbering, and immigration) when developing their identities and attractions. County historical societies and various other history museums help sustain this sense of place through exhibits and programs.

How can an informal-learning destination enhance the region's quality-of-life offerings by serving a wider range of the population, including young children and students in and out of school?

In what ways can working with artists, makers, and performers be a strategy for growing social capital? How can artists contribute to the community by working together with and for children?



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What We Heard Summary

MAY 1, 2018

Introduction

The goal of this summary is to identify issues, trends, opportunities, and thematic threads that will influence and help shape plans for a WonderTrek Children's Museum. Further, this summary is intended to inform a shared understanding among the planning committee about the purpose, audience, experiences, partners, learning interests, and potential impact of the proposed museum. Information was gathered from many sources, including regional-backdrop research, four listening sessions with community groups, two planning-committee workshops (2-28 & 3-28, 2018), and a meeting of ECFE Early Childhood Coordinators (4-6-2018). This summary covers the following areas:

- Region 5 Context
- The Region 5 Challenge and Opportunity
- The Children's Museum On The Regional Landscape
- Who Must The Museum Serve?
- What Must A New Children's Museum Have?

Region 5 Context

Demographic and Social Trends

Region 5, comprised of Cass, Crow Wing, Morrison, Todd, and Wadena Counties, has been growing over the last decade and growth is expected to continue. *Growth, however, has been uneven across the Region, from a small population loss in Todd, to a small increase in Wadena, and more than 14% in Crow Wing. Across the Region, population density varies significantly and, as summer residents and tourists come and go, the area can experience seasonal shifts of more than 300,000 people. This seasonal shift is more than demographic, influencing the social dynamic of the region as well. As one participant in the community conversations reiterated, "Summer is for tourists, winter is for locals.*

The Region enjoys a diversifying economy that includes health care, tourism, agriculture, manufacturing, government, many non-profit organizations, and an emerging local-foods movement. While some industries have declined over the years, others have emerged to keep the regional economy relatively strong. Robust and inclusive planning at the county and regional levels provides Region 5 with a dynamic base for future growth and development. In particular, *Resilient Region* sets the stage for well-informed growth and development into the future.



Schools and the Education Landscape

Serving students from pre-K to post secondary, the region's education landscape spans five counties, with 24 school districts, private schools, two community-technical colleges, and Leech Lake Tribal College. The area's planning documents, programs, and initiatives reflect *active support of K-12 education geared towards recruitment, support, training, and recognition of educators; student enrichment across literacy, arts, and STEM; career and college readiness; and post secondary transitions.*

Evident from the community conversations, *sustaining a talented and well-trained workforce is a high priority among school and business leaders.* In the Brainerd/Baxter area especially, there is considerable interest in helping youth explore alternative approaches to finding and starting a career (e.g. Bridges Career Academies & Workplace Connection). *Keeping young families in the area and attracting new ones is an equally high priority.* A children's museum is seen as a high-value amenity for families wanting to raise children in the area—and a high-value asset for the region.

Wealth Gap

Families are vital to the growth and development of the region, which is apparent in housing strategies, goals to improve livelihoods, recreational activities, and parent involvement in child's education. *At the same time, many families face challenges: 10% are considered food insecure, and the five counties of Region 5 fall into the lower third of Minnesota's counties for overall health.* While the Region experiences high rates of poverty, it's also home to one of the state's most desirable lake districts, where income and wealth are far above median.

As reflected in the community conversations, *this economic disparity is well known and of great concern, especially among those working with the region's children.* Even for families in the middle, it takes a two-person income to make ends meet. In this context, community members wanted to see programs that would make a trip to the children's museum affordable for any family. It was also noted that there is a contingent of the population that is generous with their time and money, especially when it comes to public service.

Aging Population

The region's population is significantly older than the state average, due in part to the area's attractiveness as a retirement destination. This was widely acknowledged in the community conversations but noted *more as an asset for the future children's museum.* Retirees can a valuable resource for volunteers, storytellers, and builders.

Cultural Diversity

Region 5 has not experienced the same influx of diverse ethnic groups as other parts of Minnesota. Participants in the community conversations expressed concern that *children growing up in the region will be unprepared to work with and live among people from diverse cultures.*



Within the region, the Leech Lake and Mille Lacs Bands of Ojibwe can be valuable learning partners as the museum develops ways to integrate different cultures and traditions into its programs and practices. Additionally, a few communities in the region are now home to Latino and African families, in particular Long Prairie. It is expected that ethnic diversity will continue to grow from existing clusters, especially with those associated with food processing jobs.

Some community members could imagine the arts increasing diversity in the region. Like the region's outdoor recreational opportunities, the arts drive tourism and contribute to the area's quality of life. They may also be a way to bring more of the world to the children and families of Region 5.

Where People Live

In many rural areas of Region 5, families can become isolated by geography, poverty, and not knowing what's available to them. *Many participants in the community conversations pointed to transportation, income, and lack of awareness as substantial barriers to participation in the children's museum's offerings.* There is a sense that parents don't know what they have access to.

To counter a family's sense of isolation, the museum will have to address geographical access as well as instill a sense of belonging, or affiliation within the museum. It could be a place that builds awareness about the resources families have in the region.

The Region 5 Challenge and Opportunity

The Challenge: One Place or Many?

Region 5 holds diverse and varied landscapes, areas of wealth and poverty, urban and rural lifestyles, and a range of historical legacies. *Together, these elements don't reveal a clear and unified sense of place.* Participants in the community conversations, however, pointed out certain social habits and values shared by many in the five-county region, including: a love of the outdoors, being involved in civic life, cherished family traditions, and shared stories around events and locations.

The Opportunity: Coming Together Around Place

People—their stories and ways of life—may be as meaningful as history and the environment when it comes to describing Region 5 as a distinctive and unified place. Along with heritage and nature, the people of the region can provide the elements of place that play out throughout the museum.

People

- Children at the center of civic life
- Participating in community events, contributing to civic endeavors
- Individuals with notable accomplishments and people we see everyday
- Organizations that help people (e.g. NJPA, Region Five Development Commission, CTC, chambers of commerce across the region, Paul Bunyan Education Cooperative)



Heritage

- Industries that provided livelihoods—railroads, mining, logging, early tourism, dairy farming, etc.
- Community identity recalled and sustained through community celebrations, museums, and landmarks (Paul Bunyan)
- Visible legacy—railroad tracks and buildings, farmsteads, mines, architecture

Nature

- Lakes, woods, and waterways
- Nature learning centers, trails
- Farmlands

The Children's Museum on the Regional Landscape

When Region 5 families are interested in getting together with other families, they have a great variety of events and destinations from which to choose.

The options revealed through a regional survey and feedback from community members fall into several categories.

- Libraries and parks (unstructured visits and organized programs)
- Children and family-oriented programs (ECFE, Franklin Arts Center, library programs)
- Educational destinations (museums, zoos, nature centers)
- Commercial (water parks, malls, movie theaters)
- Participatory sports events (organized sports, school and community teams)
- Churches and civic clubs (social events and programs, camps, public service activities)
- Public events and festivals (community celebrations, parades, concerts, art fairs)

Patterns of attendance for the children's museum (frequency of visits and attraction to programs and events) probably will be most similar to parks and libraries. Families who are in the habit of going to parks and libraries will likely visit the museum and view it as a place that offers experiences that are reliably the same *and* different from one visit to the next.

According to participants in the community conversations, *many of the places where parents meet up with other parents and their children, are not perceived as being for everyone.* This is largely a matter of cost (access), but social factors may also play into this perception (inclusion). There is a great desire for a family destination wherein everyone would feel like they belong. In general, participants see all of these venues as complementary to a children's museum, more than competition.

Traveling distance and transportation are key concerns among community members. Currently, families and schools have to leave the region to visit a children's museum. While a road trip to the Twin Cities or Duluth can make for a fun family outing, this isn't an option available to all.



Also, as much fun as an urban excursion can be, it's a big commitment of time, which limits the number of visits. All agree that *family visits to the children's museum should be a frequent and easy*. While some community members said that families won't drive more than 30 miles for amenities, others described how difficult it is for families to make even a 10-mile trip. One way or another, it will have to be a *high-visibility, landmark destination to make it worth the drive*.

Valuing Children's Play

Overwhelmingly, *community members acknowledged the importance of play in children's lives*. Many cited the increasingly structured lives of children, especially around play. They lamented that children today are missing out on the "free-range" childhood of previous generations, noting that, "children have forgotten how to play on their own."

While some participants preferred to call it "open exploration," play is clearly recognized as essential to a child's development and overall well-being. With more opportunities for unstructured play, the region's children can engage in different modes of learning, particularly multi-sensory, and exercise their imaginations and curiosity. Participants also cited *the need for highly active, physical play for all children*. *Play and risk-taking* go hand-in-hand. Without some element of risk, children are unable to test their own limits and approach new challenges, such as climbing a ladder or moving unwieldy objects. It is worth noting, that participants in the community conversations expressed a relatively high tolerance for risky activities.

Conversations around play included references to dramatic play in particular, and references to skill building. A key priority among the region's school leaders is *"skills more than content."* Some suggested the four Cs of 21st Century learning—critical thinking, communication, collaboration, and creativity.

360-Degree Interactivity

Participants in the community conversations were asked to reflect on the region's offerings for families and children. How are current needs being met? What's missing? What could a children's museum provide that other learning venues can't? Not surprisingly, responses focused on *a place for fun, playful learning and open exploration*. *The responses, however, also pointed to a more comprehensive view of interactivity, one that goes beyond children interacting with learning environments, to include interactivity between children and staff, children of different ages, parents and children, parents and staff, and parents and parents*. Participants described a place where parents could learn about their children's development and practice conversations with their children.



School Connections

The area's schools, not unexpectedly, have closer relationships to their immediate communities than they do to the region as a whole. That said, school leaders and other community members expressed an interest in establishing *a role for the children's museum in supporting region-wide education goals.*

Currently, school field trips cover a wide geography, from local camps to the State Capitol. Other destinations include local history museums, parks, Deep Portage Learning Center, Little Falls Zoo, and Safari North Wildlife Park. School leaders asked if the *children's museum could be a place that brings school children and teachers together from across the region*, "putting Pillager kids with Crosby kids." Various agencies are doing this now (Paul Bunyan Education Cooperative, Region Five Development, and Bridges Academy), but what are the more social, field-trip opportunities?

A children's museum could also enhance what's happening in schools through other means as well:

- *Personalized, individualized learning*
- *Kinesthetic activities not available in the classroom*
- *Building on NJPA's longitudinal research*
- *Collaborative learning across teams and schools, connecting teachers*

Who Must the Museum Serve?

In the words of the planning committee, *this will be a museum for "every child who wants to attend."* This unwavering commitment to access includes children in low-income families not living in Brainerd.

Further definition of audiences includes:

- Families with children birth to 12 years, with an inclusive definition of family in mind
- Students in and out of school, including home, charter and private schools and schools outside the region
- Agencies and organizations that serve children, including e.g. ECFE, day-care providers, Kid Connection, church camps, Big Brothers and Big Sisters
- Regional school districts, including teachers and administrators
- Tourists and summer residents
- Junior and Senior High School students in docent roles or project-focused programs

What Must a New Children's Museum Have?

Outdoor Activity

There is great interest in providing a place where dirt and mess are key elements of the learning experience.



Families want more ways for their children to have “free-range experiences,” something that was taken for granted just a generation ago. At the children’s museum, this could be a nature-play environment outfitted with natural materials, sand, and water. It could also be a place where teachers learn more about nature learning. “We have a nature center in the our backyard, how do we teach with it?” Also, an outdoor learning area might provide an attractive platform for early STEM learning.

Food

A place to eat a snack together as a family and with others. Through food, children and their families can follow connections to places where food is raised and grown. This could be one of the places in the museum where children can see things get done, from growing a garden to cooking dinner. Food is a bridge between agriculture on one end and children’s health on the other.

Water

Lakes, rivers, and wetlands are, undeniably, an important part of life in Region 5. The children’s museum must offer water to play in and feature water as an honored element of the surrounding natural environment. Exhibits could encourage exploration of the properties of water (locks and dams) and draw attention to what lives in water (touch pools).

When participants in the community conversations talked about water, the focus was often on access. The region’s lakes are perceived as less public (less accessible) than the Mississippi River, for instance. There may be an underlying expectation that the children’s museum will increase access to what has been a middle-class privilege. Can water-based exhibits and activities somehow reflect and support family time in nature, for all?

A Sense of Place

This area holds a rich heritage of railroads, dairy farming, logging, mining, and tourism. Communities throughout Region 5 have drawn on the power of place to create and sustain memorable and distinctive identities. As such, a sense of place shows up regularly in children’s daily experiences. While admitting that locals don’t go to the area’s history museum, participants in the community conversations suggested that the museum be a place where stories from the past are kept alive and showcased. Some other ways to feature place include:

- As a way into STEM learning, providing task-and-challenge models that prompt and inspire problem-solving;
- Stories that connect natural resources, geography, and geology;
- Food production changing over time;
- Storytelling by seniors.

Global Diversity

Children growing up in Region 5 probably won’t experience the same kind of cultural diversity as children in larger metropolitan areas.



Yet, as young adults they will enter a world that is increasing diverse and will have greater contact with global culture than previous generations. Participants in the community conversations agreed that a children's museum could play an important role in giving the region's children positive experiences with diverse cultures. A children's museum could help bring the world to Region 5. There is a strong desire to engage the Leech Lake Band of Ojibwe and Latino communities in Long Prairie in the planning and development of the children's museum.

Changing Exhibits

There are many reasons to refresh the museum experience with new and changing offerings. By hosting touring exhibits, the museum can expand its range of stories and experiences. New exhibits draw attention from the press and provide a good reason to add extra marketing, all helping to keep the museum in the public eye. Change can occur on many levels, from year to year, month to month, and even day to day through lively programs.

Challenging Activities

Regardless of where children are in their development, the museum should provide environments, activities, and opportunities for every child to take a risk, try something new, reach, and push toward the next challenge. This can be climbing into a tree, balancing on a swing bridge, solving a puzzle, or building the next tallest tower.

Meeting People

People—who they are and what they do—are interesting to children. Participants in the community conversations asked if there are ways to bring people and their stories into the museum, to be a part of the museum experience and help undo the anonymity of the people children see in their everyday lives:

- People who work in public services (from politicians to firefighters), volunteers;
- Amish and different cultures;
- Notable locals, people who have done remarkable things in their lives;
- Artists in residence, children taking part in ongoing projects.

Children's Mental Health

The museum should not only be a happy place for children, it should be about children's happiness, a model and a resource for adults to better understand the elements of a happy childhood.



WonderTrek Learning Experiences Framework and Logic Model

In order to thrive, all children should enjoy...	In particular, the Museum focuses on experiences in 6...	Involving children through varied that encourage children and adults to use...	Over time, children experience positive changes including these...
... Essential Experiences	Experience Areas...	Engagement Strategies ...	Process Skills	... Benefits
1. Feeling welcome and accepted	<ul style="list-style-type: none"> • Making Meaningful Connections • Get Moving 	<ul style="list-style-type: none"> • Play • Conversation • Digital Media • Materials Exploration • Place-based Contexts 	<ul style="list-style-type: none"> • Critical Thinking • Communication • Collaboration • Creativity 	• Enjoy improved wellbeing
2. Noticing, wondering, and exploring their world	<ul style="list-style-type: none"> • Exploring Together • Get Moving 			• Inspired and eager to play and explore
3. A growing sense of competence	<ul style="list-style-type: none"> • Get Moving • Expressing Yourself 			• View themselves as competent thinkers and doers
4. Supportive relationships	<ul style="list-style-type: none"> • Making Meaningful Connections • Exploring Together 			• Enjoy strong bonds to parents and caring adults



5. Understand feelings, ideas, and perspectives	<ul style="list-style-type: none"> • Imagining Something Different • Expressing Yourself 			<ul style="list-style-type: none"> • Enjoy new experiences and make new connections
6. Being open to an expanding world	<ul style="list-style-type: none"> • Imagining Something Different 			<ul style="list-style-type: none"> • Feel optimistic about the future • Feel part of a larger world

WonderTrek Children's Museum Comparables

	MSA	Attendance	Capture Rate	Facility SF	Exhibits SF	Visitors SF	School Attendance	Op Budget
Brainerd-Baxter	91,067	--	--	--	--	--	--	--
(1) Children's Discovery Museum	46,385	22,138	48%	14,400	12,000	1.84	4,813	\$365,000
(2) Duluth Children's Museum	279,771	40,019	14%	8,100	7,152	5.59	1,555	\$543,577
(3) Central Wisconsin Children's Museum	70,019	23,000	33%	15,000	5,000	4.6	2,780	\$187,000



WonderTrek Children's Museum Strategic Master Plan

(4) Children's Museum of Southern Minnesota	98,255	97,288	99%	17,000	11,000	8.84	9,294	\$949,000
(5) Children's Museum of LaCrosse	139,225	73,000	52%	30,000	15,000	4.86	6,000	\$500,000
(6) Northwoods Children's Museum	21,430	27,000	126%	12,000	8,000	3.37	1,925	\$282,000
(7) Fairbanks Children's Museum	97,581	41,000	42%	8,000	4,000	10.25	1,242	\$450,000

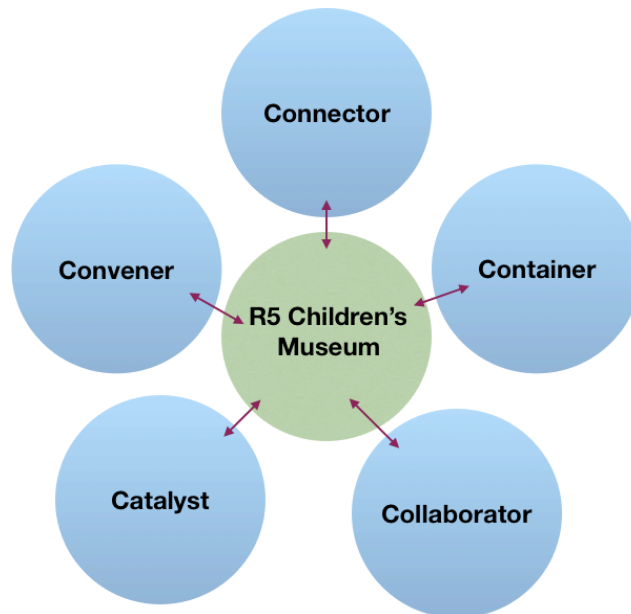


Partner and Community Engagement

The R5 children's museum will work with a wide range of partners and players from organizations, school districts, and businesses in towns and cities across the region to advance its mission, extend its reach, and deepen its impact.

Work with different partners on various projects will involve the museum in assuming various roles. In formal and informal ways, the museum may take the role¹⁹ as a:

- *Connector*, networking around a shared interest. Linking people, ideas, and organizations with related expertise and shared interests;
- *Container*, as a venue for programs and events. Providing physical space for individuals and community groups to serve the museum, its audience, or the region;
- *Convener*, bringing multiple parties together around a shared issue. Bringing children, families, and groups to explore, learn, create, and celebrate;
- *Collaborator*, creating something new together. Contributing expertise, resources, and good will, often working with multiple partners, to address larger, more complex problems, challenges, and ideas
- *Catalyst*, activating change. Building awareness, inviting new perspectives, or mobilizing for action on a relevant topic or current issue.



¹⁹ Based on Walker Art Center Art and Civic Engagement – <http://media.walkerart.org/pdf/ceworkbook.pdf>



Capital Project Phases – Starting a Museum

Strategic Master Plan (6 Months)

- Project Overview
- Vision, Mission, Values
- Community Context
- Museum Goals
- Target Audience Definition and Profile
- Visitor Experience Framework
- Business Plan

Predesign: Architecture and Museum Experience (6 Months)

- Site Selection
- Architect Selection
- Architectural Scope and Program
- Design Integration (building and museum experience)
- Exhibit Designer Selection
- Exhibit Predesign

Schematic Design (6 - 8 Months)

- Capital Campaign Plan
- Site Plan
- Architectural Plan
- Marketing Plan
- Schematic Exhibit Plan
- Preliminary Code Review
- Cost Estimate
- Operations Plan

Design Development (8 - 12 Months)

- Capital Campaign Plan
- Exhibit Design Development
- Architectural Design Development
- Updated Cost Estimate

Construction Documentation (8 – 12 Months)

- Capital Campaign Continues
- Construction Documents
- Prototyping
- Engineering Review
- Preparation of Bid List
- Final Code Review



Construction and Installation (12 - 18 Months)

- Building Permits
- Building Construction
- Exhibit Fabrication
- Shop Drawing and Testing
- Launch Marketing Campaign
- Launch Membership Campaign
- Capital Campaign Continues
- Debugging and Shakedown
- Building Construction
- Exhibit Installation

Opening

- Punch List
- Post Opening Evaluation
- Project Close-out



Lessons Learned from Other Museum Projects

The following list of lessons shared by museums that have started up or have expanded relate to the overall process. More lessons can be found at: <http://www.astc.org/pubs/dimensions/2001/may-june/smooth.htm>

- Communicate, communicate, communicate. Keep members of the team, close friends and supporters well informed. Keep public officials and the public informed.
- Manage expectations – yours and theirs. Prime the public without the hype.
- Engage the community at every step. It's their museum. Make time to gather input, test ideas, and prototype exhibits.
- Celebrate milestones and small victories.
- There will be delays. Schedules change. Build flexibility into the plan and know where you can be flexible.
- Start planning the future before you open. Opening the museum is the start—not the ending—of the process.
- Document the process. Record decisions, discoveries, and changes. Keep a journal and photograph milestones.
- Everyone needs to be thanked often and sincerely and in different ways: volunteers, friends, donors, contractors, board members, neighbors. Find what those ways are and don't forget anyone.

