



LEARN - WHY A CHILDRENS MUSEUM

WHAT IS A CHILDREN'S MUSEUM?

A children's museum is an interactive environment providing a variety of hands-on learning experiences to engage brains and move bodies. It is a curated space built specifically for kids and their developmental needs.

The content and experiences in a typical children's museum are targeted to ages 0-12, both on the exhibit floor and through program offerings. While the design and construction of the Children's Museum of Rock County will be focused on ages 0-12, the Board of Directors also understands the need for quality learning opportunities for youth ages 13-18. Therefore, the children's museum will include flexible spaces to host diverse programs to meet the needs of and resonate with older adolescents. Providing additional learning opportunities for this age group will also ensure a financially strong operation. The more ages served by quality programming, the more diverse the revenue streams.

WHY PLAY?

Play is the language of children and the process by which they learn. Playing is central for holistic child development and supports its five central domains: cognition, social interaction and emotional regulation, speech and language, physical skills, and sensory awareness.

- **Cognition:** Through play, children can explore objects and their environment, test possibilities and be creative. When children engage in daily, uninterrupted, relevant, and meaningful play for thirty minutes or more their attention span and memory skills are enhanced. ¹
- **Social Interaction and Emotional Regulation:** Children learn sharing, cooperation, conflict resolution, and personal emotional regulation during play. Research shows countries that fail to invest in social-emotional learning programs are 29% less productive than those that do and students who took part in social-emotional learning programs outperformed students who did not by eleven percentage points. ²
- **Speech and Language:** Play supports vocabulary development and language comprehension. When children play together and with caregivers they learn the rhythms of speech and the give-and-take of conversation. Early language development is critical. By preschool, a child's language skills can predict their academic trajectory. ³
- **Physical Skills:** Strong gross motor and fine motor skills are integral to brain development. The physical movements of gross motor play requires coordination between the left and right brain demanding interaction between the two hemispheres resulting in strengthened neural pathways. These strong neural pathways lay the foundation for further development in language, literacy, and math skills.⁴ Additionally, when children engage in fine motor play they refine their small muscle control and strengthen their visual-spatial skills, a well-known predictor of academic achievement, particularly in the areas of STEM. ⁵
- **Sensory Awareness:** Play engaging a child's five senses develops not only their sensory system, but their proprioceptive and vestibular systems. Proprioception relates to body awareness and helps us understand where our bodies are in space, i.e. walking without looking at your feet; and the vestibular system relates to balance helping us determine where our bodies are in relation to gravity, i.e. riding a skateboard. Moreover, the exploratory nature of sensory play encourages creativity, problem-solving, and communication.



WHY DOES ROCK COUNTY NEED A CHILDREN'S MUSEUM?

Rock County is a good place to raise a family. It provides safe communities, a fantastic library system, a well-developed parks system, and an affordable cost of living. However, Rock County does not have the same number of family recreation outlets or educational enrichment opportunities as comparable communities. The children's museum will help fill these gaps and improve the quality of life in the community.

Besides providing needed enrichment, the museum will have a positive impact on the local economy. With nowhere local to patronize, caregivers regularly leave Rock County to drive to one of four children's museums located within an hour's drive: Madison Children's Museum, Madison, WI; Explore Children's Museum, Sun Prairie, WI; Black Earth Children's Museum, Black Earth, WI; and the Discovery Center, Rockford, IL. Research shows that the average local visitor to a children's museum in Janesville is expected to spend an additional \$50 beyond the cost of admission in nearby restaurants and shops. With 76,800 annual patrons expected to be local, that translates into an annual economic impact of \$3.84 million in spillover spending.⁶



Furthermore, a children's museum is a resource that serves the needs of its community. Unfortunately, Rock County has a high incidence of childhood trauma along with lower overall education levels and lower earnings. When compared to the surrounding counties of Dane, Green, Jefferson and Walworth, Rock County has the lowest percentage of people with a bachelor's degree or higher, 24.2% for ages 25+; and the lowest median income, \$65,518.⁷ Rock County also has the highest proportion of people reporting four or more adverse childhood experiences (ACE) in the entire state.⁸ This means that an incredibly high 25% of Rock County's population has experienced multiple traumatic events during their formative years. These individuals suffer lifelong adverse effects and are six times more likely to struggle with depression; seven times more likely to become an alcoholic; ten times more likely to inject street drugs; and twelve times more likely to attempt suicide than someone with no ACEs. They are also twice as likely to have heart disease and twice as likely to be diagnosed with cancer with odds increasing exponentially for every ACE.

Furthermore, these individuals are less likely to maintain relationships, collaborate at work, or hold a job and are more likely to end up in foster care, homeless or in jail.⁹ The children's museum will be able to provide a safe space to spark interests, nurture a life-long love of learning, provide opportunities for growth and development, and promote stronger child-caregiver relationships.

How does a children's museum support workforce development?

First, a children's museum would serve as a recruitment and retention tool for area employers. The United States is a highly mobile society with many people moving for new job opportunities. This decision to move is often not solely based on a job, but also on quality of life factors. For families, those factors include: strong school performance, low crime rates, affordability, access to quality healthcare, and family-friendly amenities and activities. Children's museums fall neatly into this quality of life calculus and the children's museum will provide the enrichment and entertainment young families are looking for while also making a statement that Rock County cares about its children.

Second, a children's museum, as a venue for play, will serve as an incubator to develop 21st century workforce skills. The way work is done is changing and the top five skill sets employers are looking for include: emotional intelligence, resourcefulness, collaboration, creative and critical thinking, and communication.

- **Emotional Intelligence:** Emotional intelligence is the ability to monitor one's own and others' emotions. It is also the ability to use one's emotions to guide thinking and actions. Play gives children the opportunity to build their emotional intelligence through interaction, collaboration, and imagination. Children with higher emotional intelligence are better able to concentrate, more engaged in school, have healthier relationships, and are more empathic. They also regulate their behaviors better and earn higher grades. In adults, higher emotional intelligence is linked to healthier relationships, more positive feelings about work, and, for teachers in particular, lower job-related stress and burnout.¹¹

- **Resourcefulness:** Resourcefulness is the ability to find quick and clever ways to overcome difficulties. In other words, it is understanding how to use one's environment and relationships to achieve goals. Children who have access to play and, particularly, play with open-ended materials like blocks tap into their imagination faster and are faster problem-solvers. Resourcefulness is a necessary life skill and studies show that while academic stress adversely impacted the grades of students with low resourcefulness, there was no impact on the grades of highly resourceful students.¹²
- **Collaboration:** Collaboration is the building of helpful, respectful, and productive relationships with others in order to work towards a common goal. Building collaborative skills is a natural outcome of playing with others. The open-ended play opportunities afforded by the museum will naturally foster collaboration among children and their caregivers. Furthermore, collaboration in the workplace leads to more innovation, efficiency, success, and improved communication. Companies that promote collaborative working are five-and-a-half times more likely to be high performing than companies that do not.¹³
- **Creative and Critical Thinking:** Creative and critical thinking is the use of imagination and problem solving to apply knowledge or address challenges in new, exciting, and innovative ways. This type of thinking is intrinsic to play. As technology and automation rapidly transforms workplaces and economies, individuals need to be prepared to enter a workforce in which the only constant is change. By 2025, the division of labor between humans and machines/algorithms is predicted to be 58% and 42%, respectively.¹⁴ Therefore, successful individuals will need well-developed creative and critical thinking skills in order to offer what machines cannot.¹⁵
- **Communication:** Communication is the exchange of information, feelings, and meaning through words, actions, body language, listening, and writing. Play helps develop communication by its very process and through language development. One study found ineffective communication cost companies with 100,000 or more employees an average of \$62.4 million.¹⁶

¹ *Tip Sheets: How Play Promotes Cognitive Development*, Center for Inclusive Child Care, 2020.

² *Rethinking Learning*, UNESCO, 2020.

³ *The Predictive Value of Preschool Language Assessments on Academic Achievement: A 10 Year Longitudinal Study of Icelandic Children*, American Journal of Speech and Language, 2011.

⁴ *Movement Builds a Child's Brain*, Penn State University, 2020.

⁵ *Fine Motor Skills and Academic Achievement: Fine Motor Skills Providing a Surprising Pathway to School Readiness*, Psychology Today, 2017.

⁶ Statistics prepared by the Janesville Area Convention and Visitors Bureau.

⁷ US Census Bureau, 2020.

⁸ *Community Health Assessment*, Health Equity Alliance of Rock County, 2021.

⁹ *Impact of Childhood Trauma Reaches Rural Wisconsin*, Milwaukee Journal Sentinel, November 30, 2017.

¹⁰ US News and World Report, 2021

¹¹ *Teaching Emotional Intelligence in Early Childhood*, Shauna L. Tominey et al, Young Children, March 2017, National Association for the Education of Young Children.

¹² *Teaching for Life Success: Why Resourcefulness Matters*, Marilyn Price Mitchell, Social & Emotional Learning, George Lucas Educational Foundation, 2015.

¹³ *Top Employers are 5.5x more likely to Reward Collaboration*, Erik Samdahl, Institute for Corporate Productivity, 2017.

¹⁴ *HR4.0: Shaping People Strategies in the Fourth Industrial Revolution*, World Economic Forum, 2019.

¹⁵ *As The Workforce Transforms, Creativity Must Take Priority*, Cameron Conaway, Forbes, 2019.

¹⁶ *The Cost of Poor Communications*, David Grossman, Society for Human Resources Management, 2013.