



Information Brief: Learning and Children's Museums

Today's teachers face unprecedented challenges in meeting children's learning needs. In a rapidly changing educational landscape marked by shifting demographics, evolving learning paradigms, and never-before-imagined disruptions to classroom learning like the global pandemic, children's museums are invaluable partners to both parents and teachers, providing immersive, interactive, and enriching experiences that complement formal education and contribute to holistic child development.

Classroom Collaboration and Out of School Time

Recent studies have shown that the average K-12 student regularly attending school spends only 13–20% of their time in formal classroom educational environments (Hadani & Vey, 2020; Wherry, 2004). Any number of issues—including climate change, geo-political turmoil, and economic insecurity—affect students' inability to regularly attend and succeed in formal educational environments (US Department of Education, 2022). Additionally, lack of classroom access correlates to a decrease in knowledge acquisition: by 2030, over half of the world's youth will not have the basic skills they need to succeed in life and work (Vey et al., 2019). The pandemic accelerated this looming global crisis: on April 1, 2020, there were 194 country-wide school closures across the world, impacting 1.59 billion learners—more than 91 percent of the world's total enrolled students (Education, 2020). The pandemic has receded, but chronic absenteeism has continued. A recent New York Times study points out that there has been a “fundamental shift in the value that families place on school” (Mervosh, 2024).

While government-funded preschool programs are frequently proposed as an existing solution to these problems, and, indeed, these programs may positively impact student learning, access to formal learning settings remains limited, and several studies have documented preschool 'fade'—in fact, little correlation has been established between preschool enrollment and fourth-grade assessments (Whitehurst, 2018; Jenkins, 2018). Thus, the solution to these problems must be found elsewhere. Children's museums—which focus on providing early learning for children before and during the first years of formal learning (ages zero to eight years old)—are potent catalysts for capitalizing on the opportunities of this period, offering hands-on activities, interactive exhibits, and immersive learning experiences that offset the learning gaps.

School Readiness

The early childhood years are a critical period of development marked by rapid cognitive growth, laying the groundwork for lifelong intelligence and learning capabilities (Staff, 2022). Because of this, children's museums are uniquely suited to advancing children's cognitive abilities. Meaningful knowledge acquisition and learning skills are developed through self-directed, experimental, and content-rich playful learning experiences (IMLS, 2013), which enhance brain structure, facilitate executive functioning, cultivate early math and language skills, and encourage personal-social development (Tan, Gong, and Tsang 2021). These playful experiences build the foundation for school readiness and lifelong learning (Yogman et al., 2018). Playful learning experiences not only enhance cognitive abilities but also nurture skills such as problem-solving, self-regulation, and communication, all of which are essential for academic and personal success (Vey & Winthrop, 2020). Further, the American Academy of Pediatrics states, “Play is not frivolous: it enhances brain structure and function and promotes executive function (ie, the process of learning, rather than the content), which allow us to pursue goals and ignore distractions” (Yogman et al., p. 1, 2018).

Many children's museums also maintain a specific focus on the critical period in a child's development between birth and three years of age, with adults carefully constructing the knowledge that children and their caregivers learn (ACM, 2019). At the Children's Museum of Denver at Marsico Campus, The Center for the Young Child is an example of a developmentally appropriate exhibit and community gathering space for infants, toddlers, and their caregivers. These spaces are designed to foster exploration and learning through play, with children at the center of the experience. By doing so, they create environments where children can engage with diverse subjects—from physics to art—through creative interaction. The First 1000 Days program at the Louisiana Children's Museum (LCM) is designed to help parents and caregivers contribute to the healthy social-emotional, cognitive, and physical development of their babies through everyday experiences, including the interactive opportunities at LCM ("First 1000 Days," n.d.). In addition to excelling in birth to three education, children's museums are also increasingly helping children prepare for the classroom: The Thinkery in Austin, Texas maintains a preschool for "Little Thinkers" that prepares children for the challenges of kindergarten by using emergent educational approaches that have a child-driven approach to lesson planning that takes into account a child's skills, needs, and motivations ("Thinkery Preschool," n.d.). Miami Children's Museum Charter School has taken this one step further, expanding its school readiness programs to include formal classrooms for students in kindergarten through grade five. The Miami Children's Museum Charter School uses the Miami Children's Museum exhibits, facilities, and resources as the basis of both school readiness programs as well as formal educational instruction. ("Miami Children's Museum Charter School," n.d.)

Social-emotional Learning

Children's museums are also centers for social-emotional learning (SEL), a critical component of modern education often overlooked in traditional schooling. SEL encompasses skills such as self-awareness, self-management, social awareness, relationship skills, and responsible decision-making, which are fundamental for navigating complex social contexts and achieving overall well-being. Despite the growing recognition of SEL's importance, many states lack formal standards for its implementation in schools ("Social-Emotional Learning (SEL) Standards in All 50 States," n.d.). However, children's museums fill this gap by creating collaborative partnerships with schools and providing innovative SEL programming and resources, supporting educators with professional development opportunities, and offering immersive experiences that promote empathy, collaboration, and resilience, which all impact student success, mental health, and wellness (Langholtz, 2024). Children's museums have a greater impact in these areas than other community settings, such as children's parks (Luke, Brenkert, and Rivera 2021). To this end, the Please Touch Museum's Playbuilders program connects the efforts to link play, informal learning, and classroom success by focusing on social-emotional skill-building for three-year-olds and their caregivers ("Playbuilders at Please Touch Museum," n.d.). The success of such programs is evident in the fact that other museums, in general, are building upon the work that children's museums are already doing, incorporating these concepts into the museum field as a whole, such as the Metropolitan Museum of Art's "Social and Emotional Learning Through Art".

Children's museums play a crucial role in fostering learning, creativity, and social-emotional development in today's youth. As educational landscapes continue to evolve and diversify, the need for innovative learning environments becomes increasingly apparent. By providing immersive, hands-on experiences that promote play, exploration, and collaboration, children's museums empower children to become lifelong learners and engaged citizens. By forging partnerships between museums, schools, and communities, we can cultivate a generation of lifelong learners equipped not only with knowledge but also with the resilience, empathy, and self-awareness to navigate life's complexities with confidence and compassion.

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For more information, visit our website at www.childrensmuseums.org

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