

CASE FOR SUPPORT

Live and learn

**When play is
part of the plan,
all children thrive!**



Education is the most powerful engine for social mobility.



When is a bench not *just* a bench?

Benches are common features in outdoor spaces, offering comfort and rest for residents. When Playful Learning is included early in the design, benches can also support child development.

Look! This bench features nature and animal carvings. The I-Spy prompt on the Little Free Library encourages observation, creativity, and collaboration, and builds language skills.



BACKGROUND

Playful Learning combines the joy of play with goal-driven learning, promoting cognitive, social, and emotional growth in children. When integrated into everyday spaces—like supermarkets, laundromats, libraries, and sidewalks—it has proven to enhance development, especially for children lacking access to quality learning opportunities. These environments help close gaps in school readiness and academic performance.

As a powerful way to optimize learning for those who may be most vulnerable, the **Live and Learn pilot initiative in Philadelphia** tested a novel concept—integrating Playful Learning into affordable housing developments. This work yielded a variety of joyful installations and interactive environments co-designed with and for the community.

Success was contingent on assembling a multi-disciplinary team. Our learnings serve as a blueprint for change agents dedicated to making communities stronger. When Playful Learning becomes “part of the plan” of all future affordable housing developments, our young people have a greater chance of developing the 21st-century skills that help them to thrive.

Live and Learn envisions a new paradigm for affordable housing development: integrating Playful Learning guidelines into building design and development standards in order to expand educational opportunities for all children.

Preparing Kids for Success

Children learn and grow through all kinds of play—but they thrive when learning goals are intentionally woven into playful experiences. When supported by adults or cues in the environment, this approach is called **Playful Learning**.

What's at Play?

At the heart of this approach is the integration of six skills that research shows are critical for children's future success:

- ▶ collaboration
- ▶ communication
- ▶ content
- ▶ critical thinking
- ▶ creative innovation
- ▶ confidence

The Live and Learn Pilot

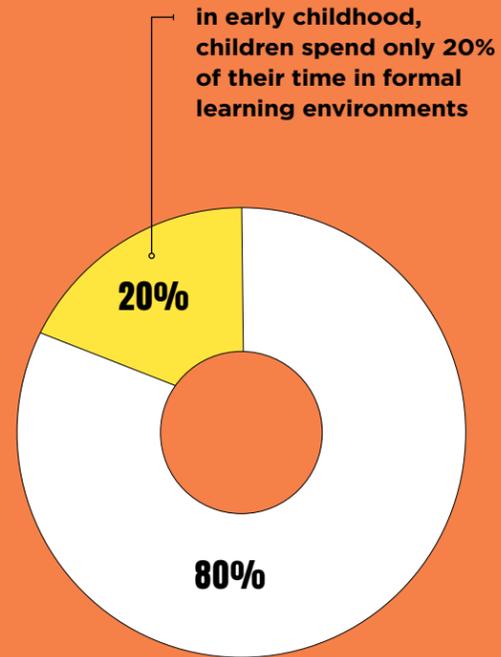
We are supporting children and families in developing the skills they need to shape the futures they want.

The Challenge

80% of a child's time is spent outside of the classroom.

For some children, that time might be spent in places that are intellectually stimulating, and filled with engaging activities that encourage collaboration, creativity, and skill building. But what about children who don't have exposure to those environments?

In cities such as Philadelphia, where over **30% of children live in poverty**, affordable housing is often one of the few viable options for many families. These families often face significant barriers to quality early learning, creating an urgent need for educational opportunities where they live.



The Solution

Early exposure to essential developmental skills can surround children from the very start.

Through partnerships with the community, co-created Playful Learning environments can be integrated into any affordable housing development. **Live and Learn has laid the foundation for creating a nationwide model.**

Play! This custom tabletop invites young learners to identify colors and shapes while building early math skills like counting, pattern-making, and understanding scale. (See page 18.)



A COLLABORATION FOR GOOD

Housing Developers

Affordable housing developers can create sustainable, healthy, and innovative housing that prioritizes the comprehensive needs of lower-income families. Integrating Playful Learning into their plans is a meaningful and low-to no-cost way to enhance residents' experiences and contribute to improving outcomes for the next generation.

Architects

Architects, alongside communities, can infuse unique, site-specific designs into affordable housing projects, enhancing formulaic layouts and materials, and fostering a deeper connection with the communities they serve.

Community Members

The community directs how their neighborhood culture, history, and values are reflected in Playful Learning environments. They are co-designers in a process that builds social cohesion, fosters pride and ownership, and ensures long-term care of these spaces.

Playful Learning Experts

These experts ensure access to, and maximization of, skill-building opportunities that prepare children for their futures. They navigate the alignment of Playful Learning principles with community goals and design ideas.



The Game Plan



BEGIN ▶

1 Rally your team to play!

Housing developers, architects, the community members, and Playful Learning experts are all critical in the Playful Learning design process.

2 Engage residents of all ages to join the fun!

Create fun activities for engagements to encourage the community to identify their priorities, values, and goals—all of which will inform the design of the Playful Learning installations.

BEGIN!

Begin as a unified team and follow eight key steps to include Playful Learning as part of the plan in all future affordable housing developments.

WIN!

Play the game together, as a team, to ensure a construction plan that thoughtfully responds to the needs of adults and children.

5 Test the ideas!

Create low-cost prototypes of the designs. Test both the Playful Learning activities and physical structures with community members of all ages to gauge interest, ensure relevance, and identify potential production issues.

4 Design together!

Your Playful Learning expert will lead the community and your team through a co-design process to create customized Playful Learning installations. Repeat steps 3 and 4 until the design is finalized to everyone's satisfaction.

3 Synthesize the input!

Develop key takeaways and outline relevant themes to inspire the design; share back what you've heard with the community to confirm direction.

6 Refine the design!

Consider relevance, ease and cost of implementation, and level of maintenance for both interior and exterior Playful Learning designs.

7 Share the fun!

Request final approval of the designs from the community *before* finalizing plans. This will increase ownership and willingness to steward the installations.

8 Start building!

Incorporate Playful Learning designs into your plans for construction so all residents can **LIVE AND LEARN!**

★
WIN

“We want all children to have access to high-quality learning environments. Our goal is to think about what we can provide in the housing space to supplement what kids are already getting—or what they may not be getting—in their formal learning environments.”

SARAH LYTTLE, Executive Director, Playful Learning Landscapes

Ideas at Play!

EXTERIOR SPACES

Envision sidewalks, walls, and columns as a canvas for wonder and joy!



“The implementation of Playful Learning into affordable housing developments adds a level of support and engagement that cannot be captured through just bricks and mortar. It promotes learning, a sense of identity, a sense of community, and multi-generational engagement.”

LINDSEY SAMSI, Senior Developer, Pennrose

Run the Road

Run the Road / 2045 Master Street, Philadelphia, PA

The Community's Input

Through a series of community engagement sessions, Sharswood residents shared a desire to reinforce identity and a sense of belonging in this world, while equipping children with life skills to navigate their city safely.



The Architect's Concept

The architects conceived of a **Run the Road** theme. The installation is inspired by a real-life road at a smaller and safer scale for children to play and learn.

On the Columns

Four spinners featuring 16 street signs are mounted to the building's columns. Kids can rotate the signs and create their own "rules of the road" as they move along a painted track on the sidewalk.

On the Walls

An I-Spy mural of shapes, colors, and figures transforms a once-blank façade into an engaging visual experience.

On the Sidewalks

Painted animal prints invite kids to step, hop, or crawl like different creatures as they explore their neighborhood.



The Playful Learning Experts' Role

Guided by the experts, this multi-part installation encourages neighbors to use their imagination as they navigate the streets. As they become familiar with the colors, shapes, and language of the roadways, they are also introduced to the critters that inhabit their environment and beyond.

Playful Learning components focus on building multiple skills including:

Content: Elements such as the spinning traffic signs support early learning by introducing real-world symbols, shape recognition, and foundational concepts related to road safety and navigation.

Critical Thinking: The animal pathway builds focus, attention, and problem-solving as children follow one set of tracks among many.

Creative Innovation: The traffic sign game allows children to create their own new game each time they play.



Neighborhood: Sharswood
Housing Developer: Pennrose
Architect: WRT
Community Partners: Lower North Philadelphia Community Development Corporation, Brewerytown Sharswood Community Civic Association, and Brewerytown Sharswood Neighborhood Coalition
Playful Learning Expert: Playful Learning Landscapes
Project Facilitator: Watchdog
Project Contributors: Philadelphia Housing Authority, Mural Arts and Donna Grace Kroh, Masters Group Design, FutureTogether

Ideas at Play!

HIDDEN SPACES

Imagine an overlooked space transformed into a natural oasis for play and discovery!



“Designing efficient and high-quality affordable housing doesn’t always allow for moments of repose and reflection, either within the design process or in the physical spaces that are built. Reclaiming an underused sliver of land left over from the building design as a neighborhood pocket park gave us a design opportunity to consider the needs of the youngest inhabitants of the buildings. We hope to have shaped the park just enough to invite children to become co-creators of a space of learning and play in their community.”

LIZZIE ROTHWELL, RA, Associate, WRT



The Backyard / 22nd Street between Ingersoll and Master Streets, Philadelphia, PA

The Community's Input

Sharswood residents envisioned an outdoor, green "oasis" for kids to connect with nature. They identified a nearby alley as the perfect spot for sharing their joy for games and exploration. Through engagement events and a mini block party, they drove the vision by voting, commenting, and previewing early designs.



The Architect's Concept

The architects reimagined a forgotten corner of land as **The Backyard**—a welcoming, safe haven framed by building walls, wood fences, and sidewalks. By centering the community's learning goals, decisions about landscaping, seating, and paving become tools for creativity, connection, and growth. Now the space features lush plantings, benches, a bird bath, and Playful Learning elements that invite physical interaction, learning, and quiet observation.



The Playful Learning Experts' Role

Early prototyping with local residents helped determine which activities sparked children's curiosity. These were honed and developed by the experts to ensure critical skills were packed into each element, further bringing this valuable community yard to life.

Take a walk in the park and find these activities:

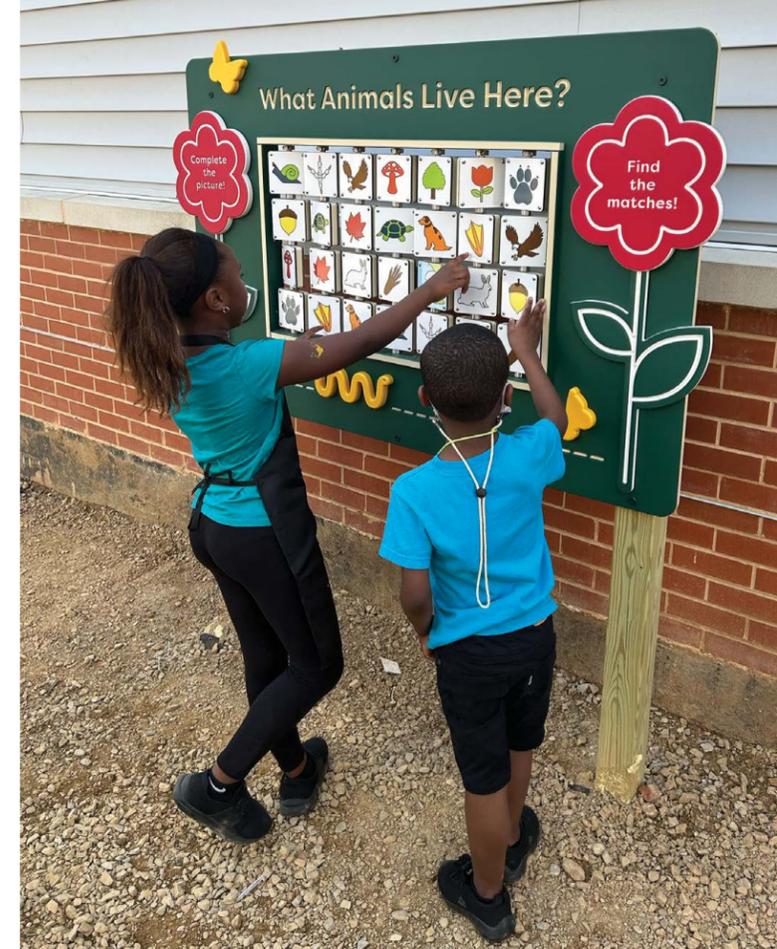
A memory-match puzzle lets children flip colorful tiles to match local plants and animals, building memory and confidence while being introduced to **nature-based content**.

The nature builder puzzle uses spinning tiles to invite kids to create their own habitat and answer the question, "What animals live here?" This activity introduces **ecosystems and wildlife content**.

Critter Creator is a spinning game that encourages **creative innovation and collaboration**. It welcomes children to stand side by side as they invent new creatures by mixing animal parts, then name them and imagine their stories.

The Little Free Library is a discovery hub adorned with nature symbols, echoed on nearby benches to spark an "I-Spy" game. As children describe what they see, they practice **communication** skills using color, shape, and pattern. Books are free for all!

An animal-print trail winds down both sidewalks, inviting residents in and challenging kids to follow a single set of tracks to the end. It promotes **critical thinking** and observation skills.



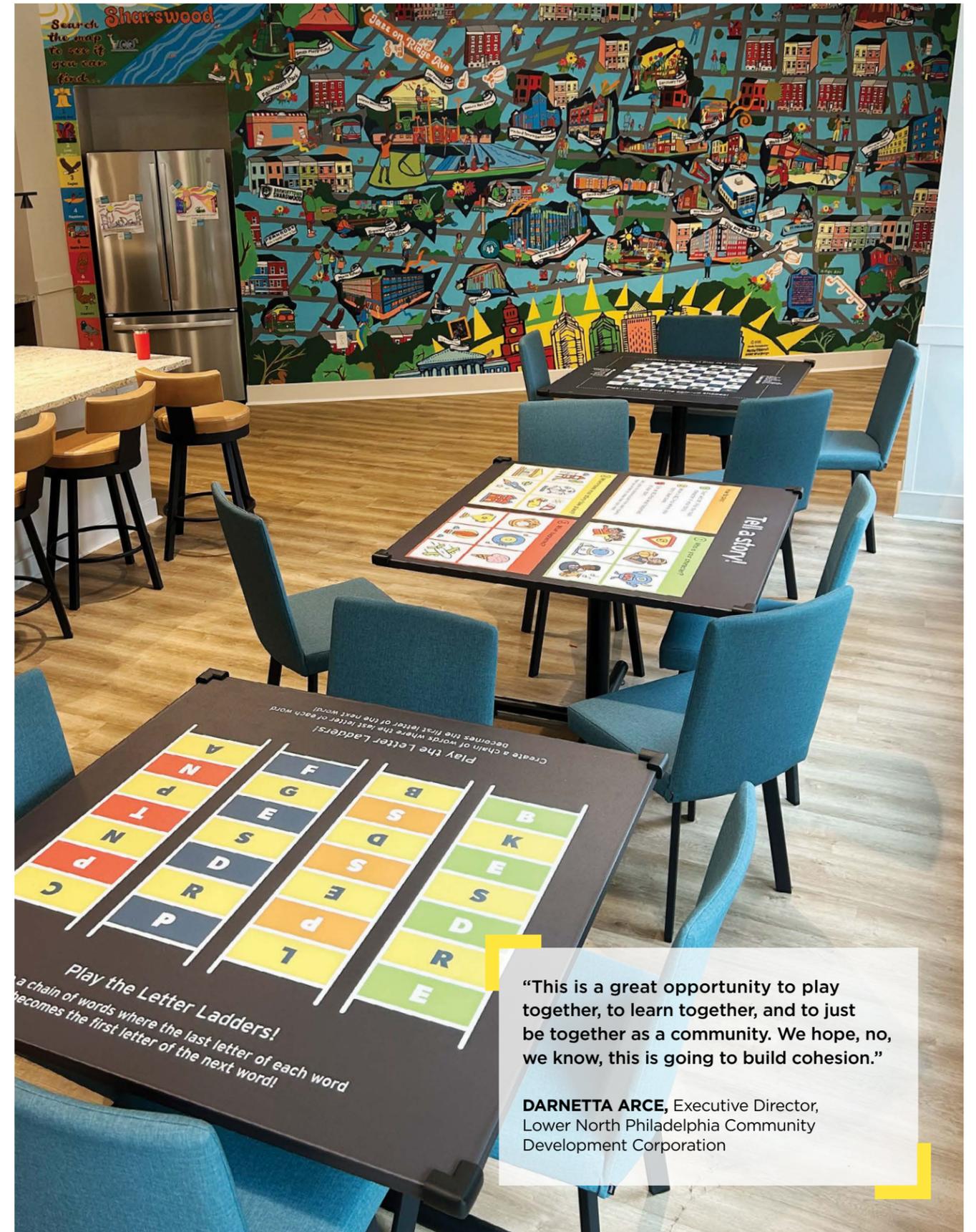
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Playful Learning Expert: Playful Learning Landscapes
Project Facilitator: Watchdog
Project Contributors: Masters Group Design, Weston Design & Fabrication Studio, KSS Architects, Domus Construction



Ideas at Play!

INTERIOR SPACES

What if rooms could build relationships, connection, and a love of learning?



“This is a great opportunity to play together, to learn together, and to just be together as a community. We hope, no, we know, this is going to build cohesion.”

DARNETTA ARCE, Executive Director,
Lower North Philadelphia Community
Development Corporation

Community Room Navigation Stations / Ridge Avenue and Master Street, Philadelphia, PA

The Community's Input

In addition to themes of safety, belonging, and identity, residents expressed a deep pride in their neighborhood. Stories of Sharswood's rich history—highlighting champion chess teams,* beloved landmarks, and jazz—stood out as powerful expressions of that pride. These insights sparked an exciting fusion of visual ideas, framed by the overarching theme of navigation.



The Architect's Concept

The architects saw an opportunity in two community rooms to celebrate a love for the local neighborhood. Recognizing that walls and tables don't have to be white, the architects enlisted muralists and designers to transform these surfaces into platforms for Playful Learning. The rooms were reimagined as hubs for community engagement and social cohesion for all ages. Here the **Navigation Stations** invite families to play, learn, and pass down the neighborhood's history to the next generation.

* Between 1977 and 1983, Vaux Junior High's chess team, the **Bad Bishops**, won an unprecedented seven consecutive national junior high school chess championships. The team was invited to the White House and an international competition in Yugoslavia.



The Playful Learning Experts' Role

Playful Learning experts do more than infuse the research on how children learn best into installations—they bridge the gap between play and design. Their guidance leads to creative, cost-effective solutions that align with the construction budget, enhance learning, and contribute to the overall beauty of the space.

In Sharswood, these Playful Learning elements were part of the plan:

The patterned chess board is a new spin on the classic game. Young learners can identify colors, shapes, and patterns and build **math** skills like counting and spatial reasoning.

The story table prompts children to tell their own tales using neighborhood-inspired icons for “who,” “where,” and “what.” As they play, they build **communication, creativity, and critical thinking** skills.

The letter ladder game invites children to build words while practicing **literacy, vocabulary, and critical thinking**. As they analyze word patterns and letter placement, they are strengthening their understanding of word structure.



The maze tables encourage the use of directional **language** (left, right, up, down) as kids trace paths with their fingers or toy cars. These traffic sign-shaped mazes connect play to real-world navigation, building spatial and **communication** skills.

At Home in Sharswood is a sprawling mural that maps the **geography** of the neighborhood and its **history** through hand-painted landmarks, historical touchpoints, and playful signage, all driven by the community. Kids build **confidence** and pride by spotting hidden elements and recognizing familiar surroundings, including local favorites like soft pretzels, the Liberty Bell, water ice, and the LOVE sculpture.



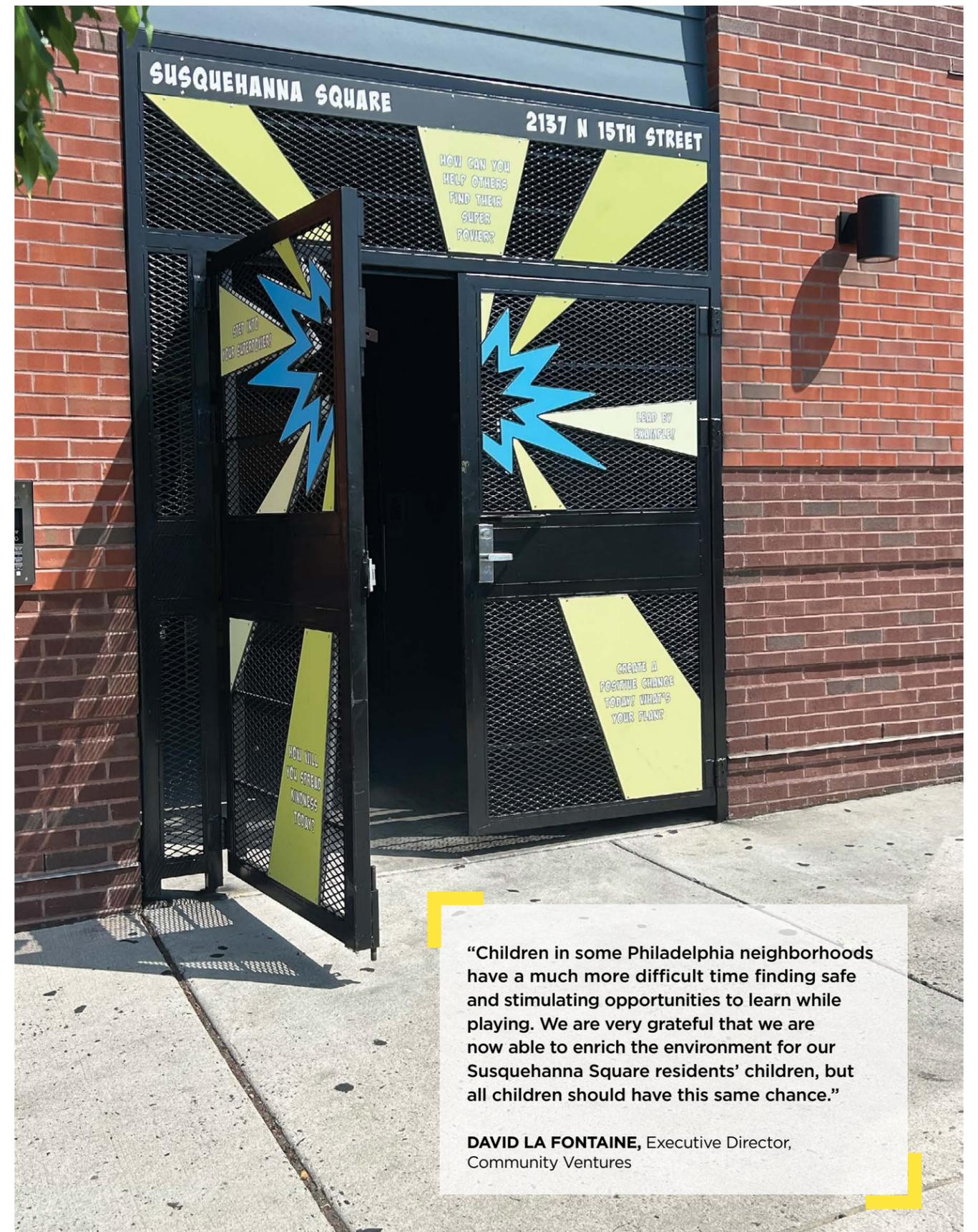
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- Playful Learning Expert:** Playful Learning Landscapes
- Project Facilitator:** Watchdog
- Project Contributors:** Amber Art and Design, Masters Group Design, Weston Design & Fabrication Studio



Ideas at Play!

JOURNEY THROUGH SPACES

Picture the path through the home as a stage for imagination and pride.



“Children in some Philadelphia neighborhoods have a much more difficult time finding safe and stimulating opportunities to learn while playing. We are very grateful that we are now able to enrich the environment for our Susquehanna Square residents’ children, but all children should have this same chance.”

DAVID LA FONTAINE, Executive Director,
Community Ventures



A Graphic Novel Come to Life / 2137 N 15th Street and 2124 N 16th Street, Philadelphia, PA

The Community's Input

Susquehanna Square residents desired a secure entry into their building, greater social cohesion, and surroundings that aligned with their interest in bright colors, graphic novels, playful puzzles, and an atmosphere of excitement (like fireworks!).



The Architect's Concept

Following several community co-design sessions, **A Graphic Novel Come to Life** emerged as the guiding idea. A Playful Learning path starts at one building entrance, weaves through the lobby and hallways, and extends into the shared backyard. This cohesive concept encourages residents to tap into their unique superpowers and celebrate everyday heroes. With a vibrant palette, bold shapes, and playful prompts, the residents' stories come alive.



Multi-sensory installations include:

An entry gate that welcomes both residents and people passing by, featuring prompts that invite them to step into their own story.

A book nook that offers a sense of arrival. It's a welcoming place to sit, read, access resources, and turn a dial to choose a superpower for the day.

A bulletin board that encourages self-expression and story-sharing.

Community-painted murals that beautify former white walls. Graphic novel-style images paired with prompts spark reflection, conversation, problem solving, and conflict resolution. Residents are encouraged to be the hero in their own story.





The Playful Learning Experts' Role

The Playful Learning experts listened closely to the community, blending their input with key learning goals to shape the design of installations across two buildings. Residents can now discover that their everyday superpowers are just as real and remarkable as fictional ones!

In Susquehanna Square, the Playful Learning components include:

Collaboration: The stage invites children and families to work together as they imagine a setting, characters, and a plot to act out.

Critical Thinking: Puzzles in the backyard spaces ask children to find words and create new superheroes.

Confidence: The inspirational murals prompt conversation about resilience and strength as families share their everyday superpowers and talk about overcoming obstacles.

“I enjoyed the community activities the most. People like me don’t usually have opportunities to get involved. No one ever asks me, ‘How do you feel? What do you want? What do you think?’ It was an amazing experience to have a voice and feel a part of it. All the things that I was imagining in my mind came to life.”

REGINA ROBINSON, resident,
Susquehanna Square



The bike shed has been transformed into a hub of activity. It features a stage positioned in front of a chalkboard backdrop. Residents can draw a story setting and then act out their story. This multi-sided construction features several superhero-themed puzzles to foster iterative storytelling.

Yard benches, replete with a bookshelf and story-telling prompts, exude excitement while providing a space for rest, reading, and social interaction.





“As designers, we go through a process of gathering, listening, and synthesizing feedback to create tailored environments. Fun activities and games, as a tool for engagement, allow us to see experiences through the eyes of a young child. On projects like this one, we can use our imagination wildly to create spaces that spark curiosity and joy around learning. After all, we all learn best when we’re having fun! Through the ‘A Graphic Novel Come to Life’ theme, residents should feel like they are in a graphic novel, and see themselves and neighbors as everyday superheroes with the power to make change!”

BETH EMIG, AIA, Senior Associate, KSS Architects

Neighborhood: North Central Philadelphia
Housing Developer: Community Ventures
Architect: KSS Architects
Community Partner: Tree House Books
Playful Learning Expert: Playful Learning Landscapes
Project Facilitator: Watchdog
Project Contributors: Anointed Studio, FutureTogether, Weston Design & Fabrication Studio, Masters Group Design

Impact Guide

Playful Learning Landscapes (PLL)

transforms the places where children and families gather every day into thoughtfully designed hubs for meaningful play and connection. These interactive spaces create the new public square, a place where communities can gather and experience the joy of discovery.

The Brookings PLL Metrics Framework

outlines a method for evaluating the positive effects of Playful Learning sites on families and public life.

THESE SITES ARE DESIGNED TO...

Promote healthy child development and learning

Sparks playful and meaningful experiences that support child-caregiver interactions known to promote cognitive and social-emotional learning and positive development.

- Caregiver-child interactions increase by up to 40% in Playful Learning spaces, fostering school readiness.
- Learning goals in installations shape conversations—for instance, designs focused on math content increase number-related talk.

Support an accessible and welcoming public realm

Offers a physical space that is easy and convenient to access, feels safe and inviting to visitors, and reflects community culture and values.

- Susquehanna Square residents feel welcome and safe, which is key for well-being.
- Sharswood residents are using The Backyard space, and the Little Free Library shared more than 100 books in three months.

Foster a vibrant and inclusive social environment

Cultivates an engaging public realm that promotes social interaction among children and adults of all incomes and backgrounds.

- Installations at Susquehanna Square encourage resident-to-resident interaction and social connection.
- Sharswood residents call Live and Learn a “wonderful addition” to the neighborhood.

Nurture civic engagement and a strong sense of community

Builds neighborhood pride and community cohesion through the cocreation and ongoing oversight of PLL sites.

- Live and Learn used a thorough community co-design process, which supports social cohesion and is a key factor for success.
- Community input and shared stewardship boost local pride and investment.

Strengthen the economic health and resiliency of neighborhoods

Has a positive impact on the surrounding community, including local businesses, property owners, and residents.

- Sharswood businesses and childcare centers use Live and Learn sites to enhance their services to the community.
- A network of Playful Learning sites creates a pathway that cohesively links together community destinations.

Hadani, H. S., Vey, J. S., Parvathy, S., & Hirsh-Pasek, K. (2021). *Understanding child-friendly urban design: A framework to measure Playful Learning Landscapes outcomes*. Brookings Institution.

Play to Win!

Success relies on incorporating three Playful Learning pillars into the design and development process:



1

The Science of How Children Learn

Decades of research indicate the qualities of environments and activities that help brains learn. Using “The 5 Principles of How Kids Learn” as a rubric to create proactive designs is critical. Playful Learning elements should be **actively engaging, meaningful, socially interactive, iterative** and joyful.



2

The Science of What Children Learn

21st-century skills that prepare children to thrive include **collaboration, communication, content, critical thinking, creative innovation, and confidence.**



3

The Community as the Driver

Recognizing the richness that gives our communities their unique character, and creating with them, is essential to telling stories that are meaningful and relevant. Enriching both interior and exterior spaces with Playful Learning opportunities is most effective when driven by the community itself. **Authentic community engagement leads to more sustainable outcomes.**

Integrate

Playful Learning at the Start

- Prioritize Playful Learning integration from the start of design in order to maintain construction budget and time frame.
- Integrate Playful Learning concepts into the architectural infrastructure rather than creating supplemental installations.
- Engage a Playful Learning expert as part of the design team.
- Recognize the value of Playful Learning as part of the community engagement process. It adds excitement and opportunities for more meaningful buy-in to the project as a whole.

Practice

a Co-Design Process

- Be open and flexible in design thinking and approach.
- Include housing developers, architects, community members (including children!), and Playful Learning experts in the process from start to finish.
- Begin by gathering the community's input, continue to refine the design with them, and culminate in prototype testing together.
- Include definitive learning goals that reflect the community's desires.

Ingredients for Success

Understand

the Project Parameters

- Create an engagement plan with the community to ensure participation.
- Be clear and set expectations with all team members about project budget and timeline.
- Identify stewards who will ensure maintenance of all Playful Learning elements.
- Align design with construction budget, timeline, and maintenance capacity.

Maintain

Intentionality as a Guiding Principle

- Design with intentionality by incorporating the science of how and what children learn together with community voices.
- Create designs for integration rather than supplementation; impactful Playful Learning does not have to be expensive or complex.
- Ensure ease of implementation and fabrication.
- Be attentive to future sustainability and level of maintenance.



About the Pilot Initiative

The Live and Learn pilot initiative was led by Watchdog and Playful Learning Landscapes in collaboration with Masters Group Design.

Developers

Pennrose and Community Ventures

Pilot Neighborhood Sites

Sharswood and North Central Philadelphia

Architects

WRT and KSS Architects

Community Partners

Tree House Books, Lower North Philadelphia Community Development Corporation, Brewerytown Sharswood Community Civic Association, and Brewerytown Sharswood Neighborhood Coalition and residents from Susquehanna Square, North Central Philadelphia, and the Sharswood neighborhoods.

Lead funding was provided by

William Penn Foundation

Additional funding for onsite Playful Learning installations in the Sharswood community was provided by Pennrose and the Pennsylvania Housing Affordability and Rehabilitation Enhancement Fund and Community Ventures in Susquehanna Square.

Research

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Hassinger-Das, B., Palti, I., Golinkoff, R. M., & Hirsh-Pasek, K. (2020). Urban Thinkscape: Infusing public spaces with STEM conversation and interaction opportunities. *Journal of Cognitive Development*, 21, 125-147.

Meltzoff, A. N., Kuhl, P. K., Movellan, J., & Sejnowski, T. J. (2009). Foundations for a new science of learning. *Science*, 325, 284-288.



Help us scale this concept!

Build awareness among housing developers, designers, communities, and funders about the value of integrating Playful Learning into design.

Facilitate training for developers and designers on how to design with Playful Learning in mind.

Advocate for the inclusion of Playful Learning in affordable housing design guidelines, LIHTC point systems, and RFPs locally, regionally, and nationally.

Champion the establishment of policies that require the inclusion of Playful Learning in public spaces of affordable housing developments as a necessity rather than an amenity.

Use Playful Learning Landscapes as a resource in the design of public spaces in affordable housing developments.

Integrate a Playful Learning expert into your design team.

Until Live and Learn is built into policy and the systems that support affordable housing development, **share the Live and Learn prototype** with potential funders in order to expand proof of concept.

To make an impact today, contact:
admin@playfullearninglandscapes.fun

“This is just the beginning. We want to see Playful Learning across the nation at affordable housing communities everywhere. Just remember, it started right here.”

SHAWN MCCANEY, Executive Director,
 William Penn Foundation



LiveandLearnPHL.org

