

KSS

Literacy Rich Neighborhood

Playful Learning Installations

Germantown,Philadelphia, PA

Executive Summary

“Neighborhood as Story”

The Literacy Rich Neighborhoods Initiative is part of a nationwide effort to expand access to high-quality early childhood educational opportunities. Drawing on emerging research in playful learning, the initiative transforms neighborhood spaces across Philadelphia into public installations that support literacy development for young children and their caregivers through the built environment.

In Germantown, Philadelphia, the initiative developed into a series of outdoor interventions embedded within historic community spaces, creating opportunities for creative engagement beyond the formal classroom. Following four years of collaboration among community organizations, local advocates, and neighbors, these three installations are rooted in the culture, history, and identity of Germantown and support literacy and language development through everyday experience. By reflecting the community in which they are located, the spaces foster belonging, neighborhood ownership, and visibility for children and families while reinforcing that they, too, belong within the civic and cultural life of the city.

These projects position play as a critical pedagogical tool, using community-based design and early intervention to address literacy gaps and educational inequity. Extensive community co-design throughout the process ensured the spaces reflect the histories and values of each place while supporting existing programming and allowing for future growth and adaptation. In collaboration with literacy experts and community members, the design team integrated opportunities for critical thinking, collaboration, creativity, and confidence-building into each intervention. Seamlessly woven into the neighborhood fabric, the installations function as vibrant learning tools within everyday public space.



Project Team:
Architect: KSS Architects
Client: Mt. Airy Community Development Corporation
Grant Funder: William Penn Foundation
Playful Learning Advisor: Playful Learning Landscapes
Grant Project Manager: Watchdog Project Management
Interactive Content Design: Interpret Green
Fabrication: Weston Design & Fabrication Studio

Project Scope: Outdoor furniture installations
Design Criteria:
· Integrates playful learning principles.
· Set of three installations, with varied program.
· Modular and capable of being constructed and installed in sections.
· Able to be relocated.
· Easily maintained with an outdoor lifespan of 5 years.
Construction Budget: $150,000



The Challenge:

Over 70% of our Children in Philadelphia are reading below grade level by 4th Grade. Setting them up to struggle in School, fall further behind, feel lost, and even be ashamed.

Illiteracy is the pipeline to prison, homelessness, unemployment, and depression.

Everything starts with reading...

How does engaging the community members in the development of a neighborhood literacy intervention impact the way the community responds to it?

How do place-based Playful Learning installations affect a child's engagement with learning, literacy, and culture?

"Play is often talked about as if it were a relief from serious learning. But for children play is serious learning. Play is really the work of childhood"

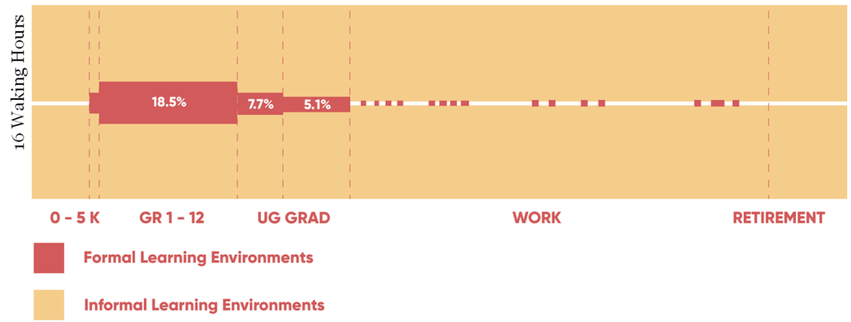
-Mr. Fred Rogers

Community Research and Engagement

Key Challenges

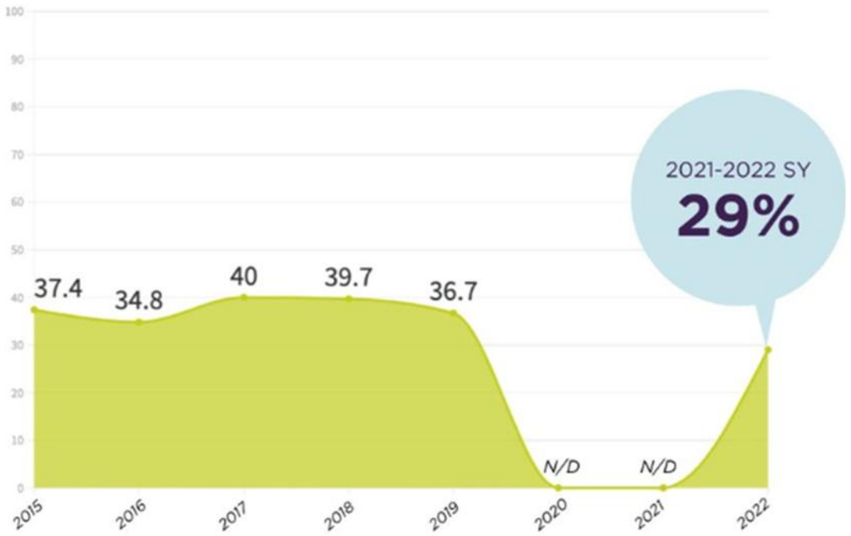
The problem of low literacy rates was exacerbated nationwide during the pandemic. This widened the gap of educational inequity, reinforced the need for learning beyond classrooms, and pushed for the importance of informal learning environments. Rather than viewing these challenges through a deficit lens, the project identified opportunities to embed playful learning directly into the neighborhood fabric.

Lifelong & Wide Learning: In Early Childhood, less than 18.5% of time is spent in Formal Learning Environments.



Source Image: Playful Learning Landscapes "Designing Cities for Children and Families" (Meltzoff et al., 2009)

Third Grade Reading Proficiency in Philadelphia



% of Students performing Proficient or Above on 3rd Grade ELA PSSA (Public & Charter Schools) Pennsylvania Department of Education and Elevate 215

Source Image: School District of Philadelphia "Office of Evaluation, Research, and Accountability"



Community Research and Engagement

Playful Learning

Early literacy plays a critical role in long-term educational success, influencing future academic achievement, economic opportunity, and overall well-being. Studies show that students reading below grade level by fourth grade face significant challenges catching up academically later in life. As a result, interventions that support literacy development during early childhood are essential to addressing broader educational inequities.

By 2050, over 70% of the world's children will live in cities. Yet many cities lack opportunities for play & learning. As urban populations grow, the need for accessible environments that support childhood development becomes increasingly urgent. This raises an important question.

Playful Learning experts ask: **What if we could transform cities into playful learning centers alive with fun opportunities for children, which prepare them for success in a global world?**

An effective playful learning strategy emerges from the intersection of how children learn, what children learn, and deep community engagement. By combining research on childhood development with place-based storytelling and collaboration with residents, these environments can foster meaningful educational experiences.



Playful Learning Design Formula
Source Image: Literacy-Rich Neighborhoods Initiative 2020-2024

Community Research and Engagement

Stakeholders and Champions

From design through implementation, community members served as collaborators, advisors, and long-term stewards. This level of involvement ensured that each intervention reflects the identity and values of the neighborhood.

Mount Airy CDC (MACDC) serves the Mt. Airy and Germantown neighborhoods, guided by its mission to "preserve, empower, and advance a vibrant and diverse Mt. Airy." The organization strengthens local capacity, supports economic revitalization, and promotes community-driven development that reflects resident needs and identity. They address long-term disinvestment along Germantown Avenue, while also undertaking literacy-focused programming. Programs like "Read by 4th" recruit volunteer Reading Captains as part of an effort to expand educational opportunities and strengthen literacy across generations. Partnerships with local organizations, such as the Johnson House, were critical in both siting and sustaining the installations. The project is intentionally structured for long-term community ownership, with ongoing programming and stewardship identified as essential to maintaining relevance and impact.





Vision and Values

The Literacy Rich Neighborhoods Initiative aligns with the MACDC's program efforts to help advance the goals of the citywide grade-level reading campaign, spearheaded by "Read by 4th", to ensure that every child in Philadelphia is reading at, or above, grade level by the end of 3rd grade. The mission is to help children develop literacy skills to not only read proficiently but also build confidence to be successful in future endeavors.

Assets and Opportunities

The stakeholder's shared values helped reveal the neighborhood's greatest strengths, not only its historic resources, but also its culture of storytelling, gathering, and collective care. Germantown's dense network of historic sites, cultural institutions, and community organizations creates a landscape deeply rooted in shared identity. In parallel, neighbors mobilized a grassroots Summer Reading Camp for young children that recruits teen mentors as Play Captains fostering literacy, play, and inter-generational knowledge sharing. The community gathered funding to keep the program free and accessible for families who may not otherwise have access to these resources at home.

These assets make the Germantown setting fertile ground for taking on the initiative of transforming everyday spaces into learning environments.



Community Research and Engagement

Storytellers Today...

The Mt. Airy CDC initiated a robust community engagement process beginning with a discovery phase that included neighborhood walks and interviews with long-standing local educators and residents. These conversations revealed an existing ecosystem of literacy efforts, from summer reading programs to “book nooks” embedded in everyday spaces like barbershops and laundromats.

The team also gained insight into the neighborhood’s layered history from the Pomona Cherokee Council as advocates of Holman Field, a community green space linked to the Lenape Tribe’s presence in the Wissahickon Valley and used today as a gathering place for the reading camp. Nearby, The Johnson House served as a safe house for the underground railroad network of freedom for enslaved people. Many more spaces were shaped by Quaker abolitionists and German Mennonites fostering an inclusive community, practicing justice and community care.

The process of gathering information reframed the neighborhood itself as a platform for learning. Through the community engagement process, the concept of “Neighborhood as Story” emerged. This led to the creation of three installations at partnering historic properties, each embedded in community programming. Each playful learning installation is an opportunity for literacy learning through storytelling, creative play, and interactive games prompted by the history of their location. The challenge was to engage ambassadors, establishing credibility and community ownership while developing a scalable framework for equitable and accessible early learning interventions.



Duval Street:
Reading Captains

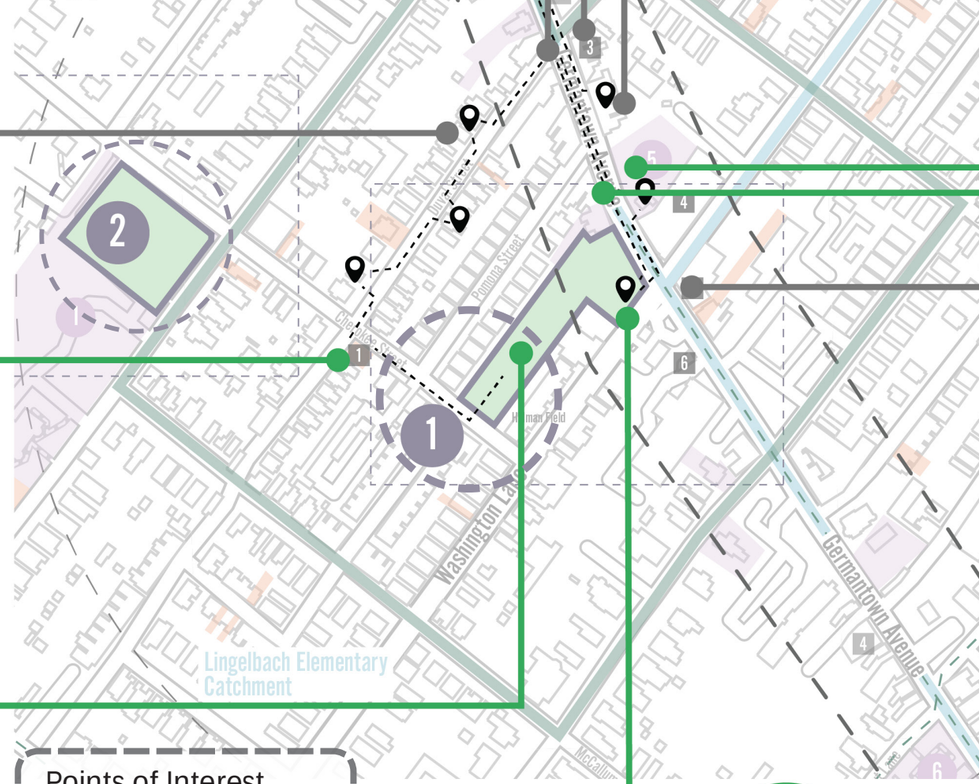


“We need LOTS of books; we need libraries and benches outdoors, we need more neighborhood cohesion; we need more play outdoors, awareness of first-generation college students on the block... How can we attract and motivate parents?”

- Educator, Caretaker and Resident



Summer Reading Camp



Points of Interest

1. Holman Field
2. Presser Senior Apartments
3. Mallery Playground
- MT.Airy CDC Partner
- Business or Residence



Johnson House Historic Site



Meeting with Community Body Organizations



Understanding Stewardship of Historic Sites



Interviewing local educators and residents

Community Research and Engagement

Historic Corridor

Contemporary voices continue to shape the neighborhood today, while Germantown's historic corridor connects generations through place and memory. One of Philadelphia's most historically significant neighborhoods, Germantown is defined by its layered cultural heritage and preserved architectural fabric. Its cobblestone streets and historic homes reflect a continuity between past and present, where active community life coexists with a deeply rooted sense of place. The design responds to this context by embedding learning within the natural and historic environment.

Site selection prioritized public access and visibility, walkability along Germantown Avenue, the neighborhood's main business corridor, and alignment with trusted community stewards. Each installation is located within walking distance, forming a distributed network of learning spaces along this primary corridor. Understanding how people move through and engage with these spaces informed an iterative design process centered on prototyping, testing, and community feedback.





1 CLIVEDEN NATIONAL TRUST

The Cliveden of the National Trust grounds, was built in 1767 and is known for being a battle grounds during the American Revolutionary War. They offer education and preservation programs. Cliveden opens the gates to their grounds and invites the community, educates students, teachers and public visitors. It's mission is to be a safe space to convenes vital conversations about history, race, culture, class, gender, civics and current events.



2 JOHNSON HISTORIC HOUSE

The Johnson House Historic Site, is one of Philadelphia's few intact historic sites and waystations on the Underground Railroad open for tours. During the 19th century, and for several generations, the house was owned by Quaker abolitionists who worked with others – free and enslaved – to secure safe passage to freedom. Today it serves as a center for Social Advocacy and a historic house museum that represents what everyday people have done and can do to make a difference in their community and beyond.



3 WYCK HISTORIC HOUSE

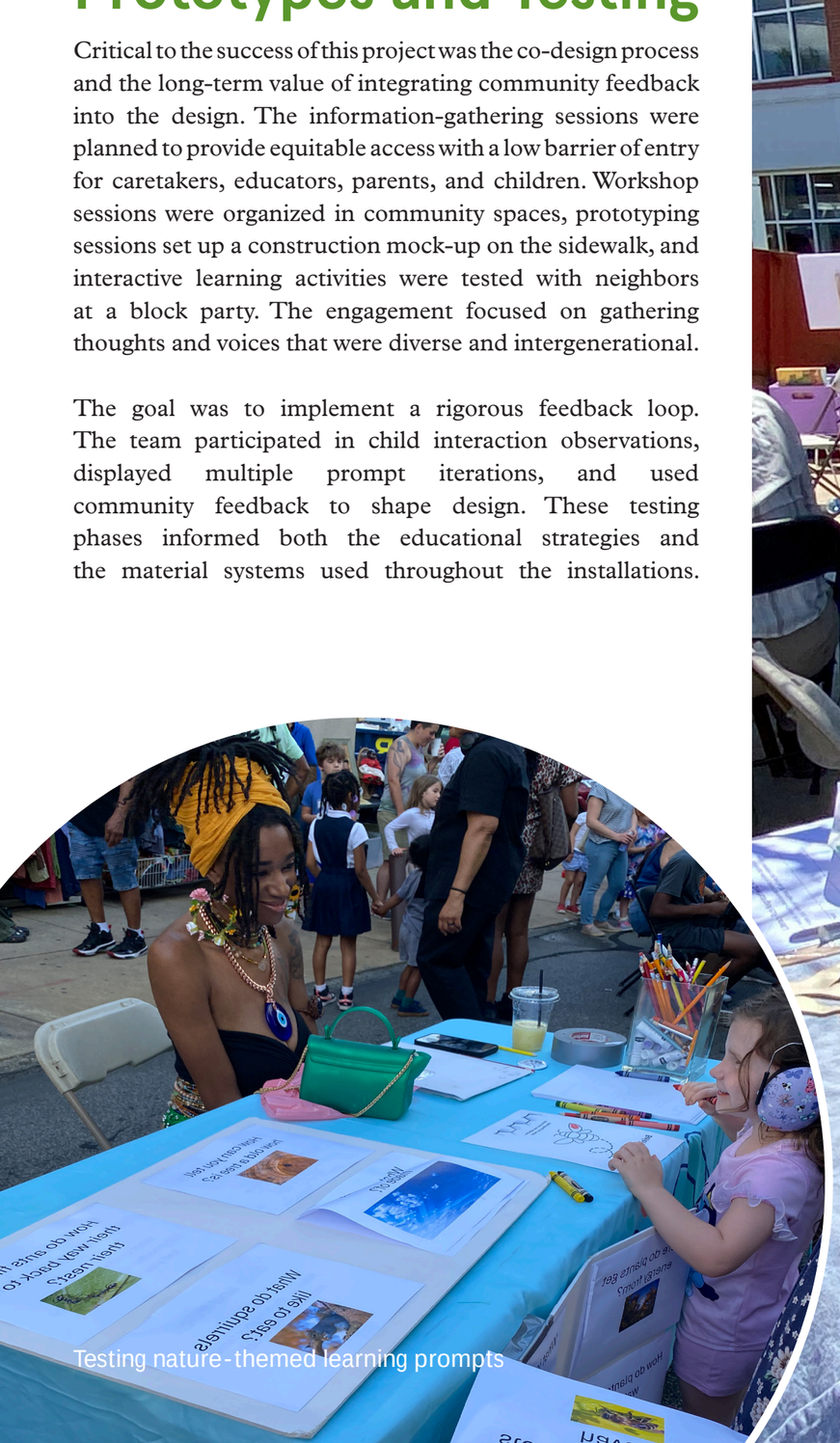
The Wyck Historic House and Garden, dates back to 1690 and is one of Philadelphia's oldest houses. Wyck's rose garden is widely recognized as the oldest rose garden in original plan in America, with more than 50 cultivars of historic roses. It was added to the National Register of Historic Places in 1971, and was further recognized as a National Historic Landmark in 1991. Today they host a wide array of public programming including home farming club, monthly workshop series, and the Philadelphia Honey Festival.

Community Research and Engagement

Prototypes and Testing

Critical to the success of this project was the co-design process and the long-term value of integrating community feedback into the design. The information-gathering sessions were planned to provide equitable access with a low barrier of entry for caretakers, educators, parents, and children. Workshop sessions were organized in community spaces, prototyping sessions set up a construction mock-up on the sidewalk, and interactive learning activities were tested with neighbors at a block party. The engagement focused on gathering thoughts and voices that were diverse and intergenerational.

The goal was to implement a rigorous feedback loop. The team participated in child interaction observations, displayed multiple prompt iterations, and used community feedback to shape design. These testing phases informed both the educational strategies and the material systems used throughout the installations.



Testing nature-themed learning prompts



Testing local stories



Building momentum by crafting book boxes



Mock-up of seating for reading nook

Physical prototypes and educational activity testing allowed the team to gather feedback from neighbors while observing what most engaged children and caregivers.

Community Research and Engagement

Material Fabrication

The design team visited the fabricator's shop to assess craftsmanship and durability while focusing on child-scaled design, material constraints, and future adaptability.

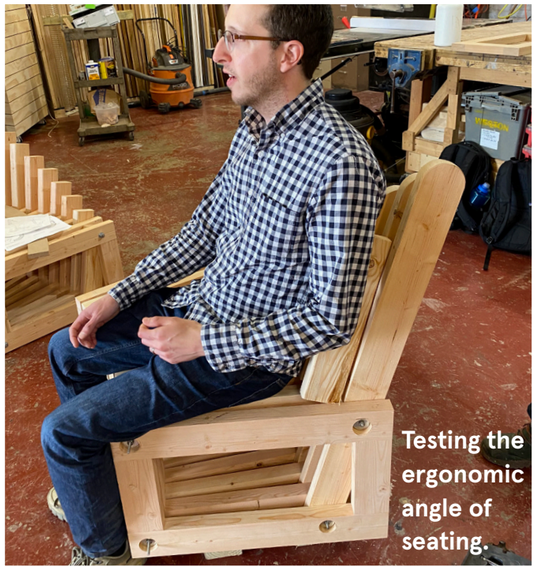
Fabrication methods were tested and planned for durability and weathering of materials in the outdoor elements, while considering materials that encouraged learning through tactile interaction.



Modular pieces were made to be installed in sections with learning components thoughtfully integrated.



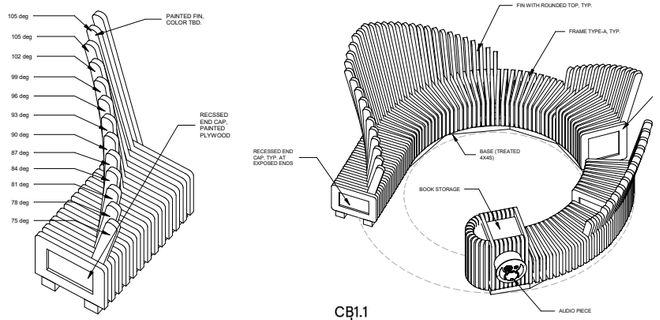
Components to create spatial aggregations..

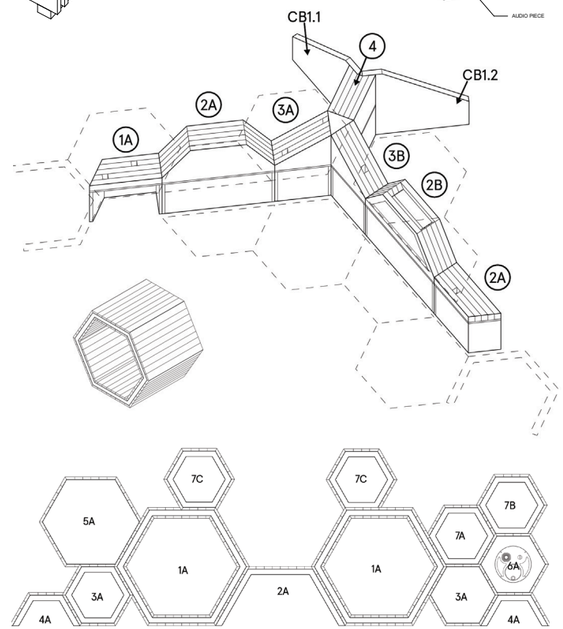


Testing the ergonomic angle of seating.



Measuring curves to align seating sections together





Community Research and Engagement

“A Tree Named Willow”

Based on the neighborhood’s unique spatial experience of ancestral and natural history, layered with the unique history of each place, and the site’s mission, the design was inspired by gathering spaces within nature. Within these environments, each installation offers a distinct approach to storytelling and literacy engagement.

The concept began with a story centered on the centuries-old willow tree at Holman Field, where the annual summer reading camp is held. In this narrative, the tree is personified as a witness and storyteller, gathering neighborhood histories within its rings while continuing to grow with new community experiences. **The story begins, “Once Upon a time in Germantown, there was a tree named Willow.”** This narrative became the catalyst for a literacy experience grounded in German-town’s natural and cultural richness and shaped the overarching concept of **“Neighborhood as Story.”**

The symbolism of the tree, rooted in place and continually growing, established a connection between nature’s permanence and human experience. From this idea, three distinct yet interconnected interventions emerged, aimed at addressing gaps in educational access. Grounded in research on how children learn, the installations are designed to be iterative, socially interactive, context-driven, engaging, and joyful. Across all interventions, design prin-ciples highlight child-scaled interaction, intuitive prompts, and flexibility for evolving program-ming.

Together, the interventions create a cohesive, resilient literacy network across the neighborhood. This set of projects is currently being used as a jumping-off point to increase literacy-rich installations within the Germantown neighborhood. Further, they explore the framework to identify opportunities for designing accessible education and implementing early learning interventions to improve literacy across all communities.



The Nest

Physical Environment

Located on the historic grounds of Cliveden, the installation serves as a year-round destination, supporting initiatives such as the Summer Reading Camp and extending engagement through Cliveden's ongoing literacy programming. Set within Cliveden's landscape of mature trees, The Nest invites exploration and imaginative play. Its integration with the natural and historic environment fosters meaningful connections to neighborhood stories, sparking curiosity, expanding vocabulary, and supporting the development of critical thinking, observation, and empathy.

Educational Environment

A reimagined reading bench was designed as a space of refuge and discovery. Inspired by the story of the Lenape and the symbolism of gathering, the design concept focuses on storytelling as communication and literacy.

The custom wooden structure draws inspiration from the form of a bird's nest, creating an immersive, nature-based setting for learning and gathering. Interactive learning activities are embedded within the structure as hidden nest eggs, including book storage, varied seating elements, colorful wildlife-themed I-Spy features, story prompts, and an interactive audio storytelling station featuring voices from the neighborhood and local authors. The Nest is a safe, welcoming space for kids and families to find respite and nurture their reading skills.

The Hive

Physical Environment

The Hive is located at the Johnson House Historic Site, a landmark deeply rooted in African American heritage and the history of sanctuary spaces along the Underground Railroad. This installation highlights the ancestry dating back to the communal efforts in support of freedom from slavery.

Educational Environment

The design focused on the idea of bees within hives working together. It uses this theme to reflect an interconnected community where people look out for one another. Drawing from themes of "the collective" and historical networks of support, the learning principles for this installation focused on emotional intelligence, and helping others. Additionally, the structure uses honeycomb geometries to frame interactive learning spaces and prompts.

The Hive continues the nature-based themes introduced at Cliveden. The installation offers multiple opportunities for shared storytelling between children and caregivers, including storytelling wheels, intimate reading nooks, and interactive word panels. These custom word panels feature vocabulary selected by the community, directly referencing the history and meaning of the site. An I-Spy handheld viewer invites children to draw connections between the surrounding landscape and their own emotional and imaginative worlds. In addition, an interactive audio station provides sing-along songs centered on themes of justice, freedom, and joy, reinforcing the cultural and historical significance of the space through music and participation.

Seeds and Bees

Physical Environment

Seeds and Bees is located within the historic, nature-rich landscape of the Wyck House, a National Historic Landmark recognized for its preserved home, expansive gardens, and working farm that served as the residence of nine generations of a prominent Philadelphia family. Situated within this layered cultural and ecological context, the installation functions as a highly interactive literacy environment that welcomes hundreds of visitors each year to engage with stories of the site and the surrounding neighborhood.

Educational Environment

The design of the installation draws inspiration from the site's historic beehives, gardening and cooking. Focused on themes of growth, ecology, and interdependence, this installation connects environmental awareness and local sustainability with literacy through interactive play.

The installation includes an interactive alphabet spinner that connects local foods with recipes, a custom-designed nature exploration table that highlights stories of nearby trees and plant life, and a weather station with an integrated forecasting component that invites reflection on local climate patterns across past, present, and future. Additional features include handheld I-Spy viewers that guide children in identifying surrounding trees and accessing related learning content, a storage compartment for books focused on local history, nature, and culture, and a word-search wall that reveals hidden words connected to foodways, ecology, and community identity.



Results

Reading Together

The educational impact of the installations can be seen through increased engagement across all sites, with stewards reporting higher foot traffic than before. However, success is also defined by the quality of interactions between children and adults. Post-occupancy interviews conducted by the design team revealed that the installations have sparked more frequent conversations around community and gathering. Book boxes continue to be replenished with materials related to each site's history and programming, supporting a shared literacy experience. Site stewards also emphasized the joy of discovery as caregivers and children encounter the installations in everyday moments.



"How many people can say they learned to read in The Johnson House? So many co-conspiritors came here to make this a better place - it is very intentional, ancestral, and it's rooted in everything that my child is..."

- Resident and Parent of Reading Camp



Feedback from Stakeholders Hosting the Installations:

- Enhanced existing programming and created a catalyst for expanding playful learning into existing educational curriculum.
- High multi-generational use and seating is popular with adults due to comfort and location.
- Local schools in the neighborhood visit regularly for outdoor learning or to hold recess.
- Increased visitation from families, daycare operators, summer camps and all expressed gratitude for easily accessible and safe educational opportunities.
- Stewards continue to manage ongoing programming with literacy partners (i.e. host local library story time readings).
- Kids engage most with activities that have moving parts.

Results

Continuing Growth

This project demonstrates how community-driven design can extend education beyond traditional boundaries, transforming neighborhoods into literacy-rich landscapes that support educational equity and social connection. “Neighborhood as Story” establishes a long-term literacy framework with evolving programming and expanding installations. This project serves as a catalyst for more education equity with installations as a prototypes for a broader network of literacy-rich environments. It makes a significant impact on creating informal spaces for kids to learn by prompting parents and children to discuss important learning principles in a meaningful and engaging way. As architects focused on educational placemaking, we bring a unique process to shaping environments where storytelling, play, and learning are embedded into everyday life.



Key Takeaways:

- **Community engagement is a process and an outcome, instrumental to improving literacy and strengthening community - aligning with the Theory of Change.**
- **Community-designed (co-designed) installations promote engagement and continued stewardship.**
- **Literacy-focused installations can take many forms and exist in everyday spaces where families live and connect.**
- **Literacy-rich neighborhoods can be built on recognizing and celebrating community strengths.**
- **Successful community-centered efforts require emergent, flexible approaches.**



“You can’t know who you are, unless you know where you are. Learning how to read is not a job, but a joy. It’s where our hearts are…”

- Resident and Grandparent