



Images courtesy of The Bradley Projects

Designing Spaces for Modern Childhood Development

In response to the challenges of reopening safely amid the COVID-19 pandemic, The Bradley Projects, in partnership with The Bradley Development Group and Certified Construction Services,

Jared Bradley
The Bradley Projects

worked with

the Linden Waldorf School in Nashville to design pavilions that allowed classes to meet outdoors. The private, 12-acre early childhood to 8th-grade school prides itself on cultivating imagination as a tool and skill, and the pavilions were designed to support these values while also catering to the unprecedented obstacles presented by the pandemic. The concept of this outdoor learning initiative has proved so successful that the school contracted the firm to expand the outdoor

learning environments to host classes even when the pandemic is over.

Returning to the Classroom From a Digital Landscape

As any parent or caretaker knows firsthand, the pandemic severely impacted childhood education. For over a year, policies and procedures changed seemingly every day as the virus and its impact evolved. With rising vaccination rates and a better understanding of the pandemic, many schools returned to in-person instruction.

After several months of learning via computer screens, educators, parents, and students no longer take classroom design for granted. While it was a viable temporary solution for the pandemic, virtual learning mitigates

academic growth as well as (and maybe more importantly) social development. With educators and designers paying more attention to how environments impact students, some are exploring improvements to the traditional classroom set-up. While many schools built outdoor classrooms as a temporary solution to ensure everyone's safety, some leaders are now looking at these spaces as permanent facilities that would inspire students to be more creative and to care for the environment while facilitating social skills and cohesion.

A recent study published by *Outdoor Classroom Day*¹ found that getting outdoors results in better learning outcomes across the board, supporting healthier, more active children. Outdoor learning environments cater

to children's individual needs, providing them with a safe, productive space that cultivates learning and growth while boosting mental health.

The Linden Waldorf Project

Linden Waldorf School in Nashville embraced outdoor learning as it continued to expand its commitment to open-air classrooms and deeper connections to nature. The campus now includes eight pavilions designed by The Bradley Projects, built to reflect the sun and withstand the weather throughout all seasons. The campus provided faculty with numerous opportunities to expand curricula, from gardening and woodworking to classes emphasizing responsible environmental stewardship.

The philosophy of architecture is about enhancing the quality of the space and designing for the experience within. The core of our firm's work is inspired by creating boundary-pushing



concepts that fuel the evolution of built environments, whether it be a residential development, commercial space, or in this case, a school. It's about developing and defining a structure that's progressive while pushing through constraints. When working on the Linden Waldorf School pavilions, we understood the value of designing with well-being and space-making in mind.

Our firm took just four weeks to complete the design, obtain

the permits, and construct the outdoor pavilion structures for the school to use during the fall 2020 semester. While the compressed time frame seemed daunting at first, knowing we had a limited amount of time to complete the work forced us to think outside the box while also adapting to unprecedented circumstances, including supply-chain concerns and health regulations for our staff.

We focused on both interior classroom space design and master planning for the entire campus to complement the school's functions and values. For all of our projects, especially those that have fast-approaching deadlines and constraints like this one, we work with the client to quickly identify project goals and timelines, ensuring high-quality results in a short turnaround time. It was essential to maintain that channel of communication with this project, as we wanted to provide the outdoor pavilions to students by the beginning of the fall semester.

When approaching a project that's meant to last over the long term, it is important to look at significant contexts surrounding





the project. For the pavilions at the Linden Waldorf School, we looked to the school's curriculum of outdoor activities for inspiration, making sure the pavilions emphasized responsible environmental consciousness through their design. While this was a solution for an immediate problem, the firm made sure that the pavilions could be used year-round and would still have a purpose after the pandemic. We knew that sustainability and environmental consciousness is an element of learning that is important to the school, so we wanted to ensure that our design facilitated this curriculum in an immersive, well-rounded manner.

"Long before COVID-19, our mission, vision, and values have always reflected being stewards of the earth and caretakers of a sustainable future," says Tricia Drake, Head of School at Linden Waldorf School. "We have always wanted our students to be outside in nature and to learn from it, which they have always loved and thrived in. The outdoor pavilions have added to our core values

and commitment to enhancing education through nature."

Throughout the entire process, we featured tools and design elements related to sustainability. Each pavilion features tree stump chairs, mulch flooring, hand-cleansing stations, and nearby portable sinks. The eight structures have roofs and partitions to provide shade from the sun while also allowing open-air lessons for the school's 120 students in pre-K through 8th grade. The canopy overhead is built with a tongue-and-groove wood ceiling system that is both functional and beautiful. These structures allow students to reflect on topics like geometry and physics inside of their own existing environment. By using natural wood materials and no electricity, the pavilions present the students with an immediate example of how to use natural resources. Outdoor learning also presents unique health benefits, such as increased air ventilation, which dilutes airborne viruses and lowers the risk of infection, making it an ideal

environment for learning in the age of COVID-19.

Environments That Foster Connectivity

In architecture, it's important to develop innovative strategies for using natural resources and elements. Human activity has a significant impact on the natural environment and using sustainable development practices in architecture has a large capacity to reduce energy consumption and greenhouse gas emissions while improving the health, well-being, and quality of life within the space. By using sustainable development as an integral solution in our designs, the firm presented the opportunity to address current and future challenges. We wanted to use the sustainability of this project to encapsulate its use fully; we wanted to set that example for children directly in their built environments. If students can draw inspiration from and connection to the natural environment through the physical classroom space itself, it sets them up to

obtain a deeper, well-rounded understanding of the real-life applications of their classes.

Since the Linden Waldorf School reopened in August 2020, we have received positive feedback from the school's administration about the pavilions' impact. Within a highly interactive outdoor environment, educators have reported that the students are more engaged, focused, and happy than before the pandemic began. School officials plan to use the outdoor pavilions even after challenges from the pandemic have subsided. The school's curriculum includes outdoor activities, and the pavilion classrooms provide the perfect backdrop to facilitate those lessons.

Future of Classroom Design

Although the pandemic presented a host of challenges that required immediate solutions, it also gave birth to a series of innovations that can benefit

current and future generations of students. While the flexibility of remote learning was beneficial as a short-term tool for many, it also emphasized the irreplaceable value of in-person instruction.

That's why school leaders are prepared to rethink the way they approach education design and reinvest in new approaches. According to the Child Mind Institute,² students who play outside are smarter, happier, more attentive, and less anxious than those who spend more time indoors. A study posted by Nature Scientific Reports³ noted that spending 120 minutes a week outdoors greatly enhances one's overall sense of well-being; participants who met this standard were 60% more likely to report being in good health.

The Linden Waldorf School project is a template for how educators and families imagine childhood education. Moving forward, I hope to see

the trend continue to evolve as we cultivate an environment that encourages children to thrive in the classroom.

Notes:

¹ <https://outdoorclassroomday.com/resource/muddy-hands-report/>

² <https://childmind.org/article/why-kids-need-to-spend-time-in-nature/>

³ <https://www.nature.com/articles/s41598-019-44097-3>

About the Author

President and Founder of The Bradley Projects, Jared Bradley, AIA, NCARB, pursues progressive architectural styles that benefit tenants and deliver value to entire communities. The firm's clean, modern, and crisp concepts complement neighborhoods and showcase architecture itself as a true art form, not just a means to an end. Bradley's imaginative and progressive designs have guided the firm's approach to development. The firm's scope encompasses a mix of building types, including multifamily, retail, commercial, and educational projects.

Effective Learning Spaces

- Are mobile, flexible, varied, and connected
- Provide students with choice in where and how they learn
- Can be adapted to accommodate learning modes and technology
- Provide optimum learning conditions such as temperature, light and acoustics
- Support opportunities for students to learn independently and in small and large groups
- Support collaborative learning and teaching for students and teachers.



JudeAnd/Shutterstock.com