## Flexible Furniture For Flexible Thinking

For the start of the 2015-16 school year, the first and second grades of Nashville's Linden Waldorf School implemented the "moveable classroom," a pedagogical classroom design known in Germany as "bewegliche Klassenzimmer" or "floating classroom." The following overview interprets the context and benefits of this elegant antidote to static learning.

The transition from kindergarten to the grades is a milestone in any school. In some schools—as in the Waldorf tradition—children in first grade have just left a world where story, snack, and nap built the simple scaffolding of their day. This new experience can be their first with academic study, at least in the sense that they are more consciously using their literacy and mathematics skills.

Even on paper, it's a little daunting. Then there are the straight-backed chair and desk, between which one must remain placidly sandwiched. No squeaking the chair on the floor. No rattling the desk with your hands. Even the lightest of backwards leans can have punishing results.

It's not a pretty picture. Though it's somewhat unfair to blame this phenomenon on traditional classroom design, the fact is that the mental, emotional, and physical impact of starting first grade is huge. In an effort to pad this leap, Linden Waldorf School in Nashville, Tennessee, has implemented a moveable classroom in the first and second grades.

Little is available about the exact origins of the moveable classroom concept, except that they occur within the past fifty years in Scandinavia. Not surprisingly, the German public school system is one of the design's most prolific hosts and possibly a strong contributor to its current form: sturdy two-seater benches and large, buckwheat-filled cushions. These benches and cushions are handmade from quality materials-solid woods, like maple and oak, and richly-hued canvas—and they can function as work desks, art easels, or obstacle courses. Moving them from one function to another is important work, perfectly suited for small hands and growing bodies.

The children in Catie Johnson's first grade class at Linden Waldorf School are familiar with three main formations for the room: Ring, Rows, Square. In Ring, cushions pad the benches with little ones on top—sitting "criss-cross applesauce," kneeling, or with feet dangling. In Rows, their cushions become seats and their benches, desks. In Square, benches are placed end-to-end with seat cushions either topping them or on the floor alongside them, the children facing inward.

As a part of each day's circle, the first graders are also accustomed to the occasional mix-up. Benches might be turned upside down to act as balance beams or stacked to form mountains. These formations give the children crab crawl to take their place. In limited space, the second graders demonstrated what keen awareness for space their new classroom gives them.

You don't have to scratch too far below the surface to see the purpose behind all of this flexibility. Far from sacrificing

First and second graders at Linden Waldorf School study in moveable classrooms. Low bench-style desks with buckwheat-filled cushions replace rigid chairs and heavy desks. While usually arranged in three main formations—Ring, Rows, and Square—creative teachers find additional uses as well, including balance beams, "mountains," a stage, or stacked to one side to create open space for indoor jump roping or other gross motor activities.





well-calculated challenges, which they meet with growing skill and helping hands. For economy of movement, each bench accommodates two students– "benchmates"—who are in charge of moving the furniture into its many iterations. The same benchmates assist each other as they struggle with physical feats.

Linden second graders are equally adept and inventive. For a rehearsal of their Michaelmas play, Michelle Simmons had them bunch benches in the corner to stand in for a stage. For gross motor activity in circle, the benches and cushions were pushed as far as possible out of the way for bunny hops, wheelbarrows, skipping, and form, moveable classrooms enable it. They enable the type of learning that sevenand eight-year-olds are just getting used to doing everyday, and it's certainly not a given that this learning would otherwise come naturally.

Assessments for first grade readiness are not unique to Waldorf schools, and, though some schools implement desks and academic lessons as early as kindergarten, most assessments acknowledge that these will be a new feature in first grade. Assessors will generally have an eye to whether a child seems capable of sitting in a desk and calmly receiving information.

The thing is, very few six-year-olds are

truly ready to fill this tall order. Even past the age of seven, many children are still "thinking with their bodies," and their memory for rules and instructions isn't something they can easily turn on and off from a static, seated position. This explains why Waldorf kindergartens use rhythmic and repetitive actions to inculcate the expectations of the community, and why so much of the Waldorf curriculum is brought through "real" work (i.e., work you do with your body).

This pedagogy does not come from esoteric science, but from tested neuroscience. Most of our neural circuits are outbound from the cerebellum, the center for motor control in the brain. This explains, in part, why learners can retain input so much more easily when an activity-even one as simple as drawing or writing—is connected to it. It is the same reason we take lecture notes rather than idly listening, and practice a golf swing rather than reading about it.

Larger scale controlled movements provide larger scale help to the memory. Activities that require balance strengthen the inner ear, a vital part of our vestibular system and one of the first to develop in the brain. So when Mrs. Johnson has her first graders enact "the stork," slowly balancing on the upturned benches that are now balance beams, she is conditioning them for the heart of her lesson.

Perhaps more important is when the lesson ends, and the children are free to stretch on their benches and rearrange their bodies however they need to. Katie Reily, a veteran of Waldorf educational support curriculum, points out that this permission to wiggle is tantamount to "permission to mature at their own speed." She adds that a lack of this permission can result in challenging behavior or, worse, unconscious selfstigmatization. "Continuous reprimands can lead a child to conclude he is just plain 'dumb' or 'bad." The moveable classroom indirectly answers and directly bypasses such problems.

Of course, you don't need a moveable classroom to stimulate the cerebellum and the vestibular system. Waldorf schools are particularly celebrated for movement between lessons, outdoor recess, and free play. These rituals are the "out-breaths," much needed after the many more rigid activities through which children are guided during an average school day. Not every school has the outdoor space or flexible curriculum for "out-breaths" between classes, but bringing the manipulable structures and strenuous labor into the classroom itself gives an added benefit to schools who do, while carving out crucial space for those who don't.

Waldorf schools are also known for using "Extra Lesson" teachers, or "Educational Support" teachers. They work with the classroom teacher to remove any physical or neurological hindrances to learning, both of which would be more apparent in the moveable classroom. Most public schools also employ at least one person trained to do this type of work, but an observant teacher could simply find this support in the many forms of a moveable classroom.

Imagine the insight that teachers receive from watching their students at recess. They get to see their students' bodies in motion, how they grapple with heavy objects and obstacles, and whether they rise to the occasion of helping a less capable friend. This is exactly the kind of picture a teacher gets with a moveable classroom, and it doesn't require additional recesses or lush acreage.

Benches stacked to form mountains are topped by

other. Slowly and silently, children inched across the highest bench, as their partners' hands remained patiently extended in case of need. Fearful climbers froze on hands and knees until wordless encouragement came, and small hands on their shoulders helped them brave the summit. The entire classroom was charged with a

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each child with varying levels of physical and emotional confidence. For work, different children form their cushions into different kinds of seats depending on their strength, habit, and mood. Benchmates cooperate to provide rich social context for their learning needs.

The moveable classroom gives Mrs. Johnson and Mrs. Simmons a unique opportunity to apply movement as a healing treatment to the social dynamic of the classroom. In first grade, children are just coming into their sense of empathy towards peers and authority figures. Acquiring this empathy is the most important developmental milestone they'll surmount, so exercising it is always a valuable opportunity.

Exactly this reason once motivated Ms. Johnson to spend ten minutes of morning lesson letting the children scale a mountain of benches and take turns helping each deep respect for the task, and the play at recess that day was more harmonious than ever. These are the moments that bolster the physical and social confidence of a newly-formed class. These are the moments that make it easier to learn and teach.

Linden Waldorf's own Educational Support teacher, Mary Bryan, who conducted first grade assessments for each child in the current class, has a privileged perspective on how their new classroom design has helped them. To describe it, though, she uses neither Waldorfism nor Cognitive Science factoid. Instead, she conjures up one simple word for their thrill at being able to move in the classroom, and the word is "joy."

