



Expeditionary Learning: A New Approach to Sustainability-Focused Education

Ted Mero



Students at Mundo Verde grow and pick herbs from their garden for use in cooking class.

The school's unique blend of expeditionary learning—an approach built around repetitive, ongoing outdoor curriculum events—sustainability, and bilingual education provides a multilayered model for future school developments.

Upon entering Mundo Verde Bilingual Public Charter School, a visitor might find five-year-olds donned in badges and reusable gloves pulling recyclables out of trash bins and placing them in clear containers. Or witness a group of first graders tending to their compost pile on the grounds outside. Or observe a classroom full of four-year-olds in lab coats studying ant communities through microscopes and magnifying glasses.

All in a day's education at this two-year-old Washington, DC, school, which played the dual role of host and honoree at the second annual U.S. Department of Education Green Ribbon Schools awards this past April, one of 64 schools across the country recognized for their sustainability efforts.

At the ceremony, the school was lauded as a “win-win-win” for its triple-bottom-line focus on sustainability, saving money, and preparing citizens for the 21st century, illustrating a growing trend of school networks that are pushing sustainability both operationally and academically.

Mundo Verde is far from the first of its kind. Chicago's Academy for Global Citizenship, part of the Chicago Public Schools system, started in 2008 in a former dental tool factory and takes a holistic approach to sustainability education. Construction is underway for a new net-positive energy campus.

Los Angeles' Environmental Charter Schools, meanwhile, is a network of free public schools in underserved areas of South Los Angeles. The network, which started in 2000, strives to develop future college graduates who are empowered to become quality stewards of their community and world through project-based learning and living campuses.

Ted Mero is a contributing writer to *Sustainability: The Journal of Record*. He can be reached at sustainability@liebertpub.com.

Despite its short tenure thus far, the Mundo Verde example has something to offer in its own right: a familiar story with a twist.

“Because we started out in a pretty typical situation without a lot of resources and without a building in mind, our path is pretty typical,” says Mundo Verde board member Jonathan Halperin. “How we've been able to navigate the path is something we'd like to share, because we think it can be pretty useful, both to existing and future charter schools, other public schools, and folks who want to set up new schools or improve existing schools.”

Beyond that, the school's unique blend of expeditionary learning—an approach built around repetitive, ongoing outdoor curriculum events—sustainability, and bilingual education provides a multilayered model for future school developments.

The Three Pillars

When Halperin joined the Mundo Verde team three years ago, a small group was already working with the DC Public Charter School Board to find a home for a school built around the aforementioned pillars.

The public charter school board was skeptical that one institution could handle all three focuses, but the people behind the Mundo Verde plan insisted.

“It was our view that it has got to be all three, otherwise you've got a huge missing piece,” Halperin asserts. “The reason for that is we're starting early with preschool kids, helping them build and internalize this core set of values, attitudes, and skills over time that we think are required to be leaders of the future.”

Halperin explains that the bilingual aspect is, in essence, a surrogate for multicultural leadership and sensitivity, and a way to open doors for a wider scope of people to share in the sustainability aspects.

The charter includes a two-pronged approach to sustainability: one part pedagogical, one part operational. Guided by the U.S. Partnership of Education for Sustainability Standards, the curriculum is built to ensure that students are acquiring the skills, context, and “habits of mind” related to sustainability.

“We’ve developed habits of mind for all the work we do as students and adults, and character traits we think embody what we want our students to be as adults,” says Kristin Scotchmer, executive director of Mundo Verde. “So even when they’re looking at reading and math and all the core content that every student looks at, we’re doing it through the lens of a guiding question that’s framed around a sustainability topic.”

In first-grade, students compost and recycle and learn the chain of where things come from, where things go, and what role recycling plays in that.

Recycling monitors for the school remove recyclables from trash and move them into a clear receptacle as a way to flag it for other people and remind them where certain items should be deposited. The students then learn not only why recycling is important, but how to teach others and raise awareness about it.

“These become habits for life,” Scotchmer says. “They don’t have to learn to recycle when they’re 20 and have their first apartment. They are learning this as a value and as a skill in a way that will allow them to move through life and influence other people.”

In a ten-week study of ants, students incorporated science and math skills by learning about the physiology of ants, while also learning about shapes and numbers by identifying and counting parts of the body.

“They are learning about shapes and numbers, as they would be anyway, but they are doing it through a deep inquiry of what is an ant and why does the ant live,” Scotchmer explains. “And they are also learning about the social side of ants, how ants form community, which is also a parallel to learning about the different roles in a community and taking responsibility, and you can see those things linked back to sustainability.”

Perhaps most critically, the students are not only learning these skills, but learning how to be advocates of sustainability practices as well. The first-grade class was the first to compost on the grounds, for example, and they later conducted a demonstration of what they’d learned as a way to teach students in other grades and staff members.

“So it’s not only learning it, but having to say it back to someone else,” Scotchmer says.

As part of the expeditionary learning process, the entire student body makes the short jaunt to Rock Creek Park on a monthly basis. The students are broken up into groups that work in a specific part of the park on a specific mission, whether a collaborative project, a stewardship where they clean up the grounds, or as part of a wildlife adventure. Beyond that, the respective student groups return to the exact same location in the park every month to observe and notate the transition of the seasons.

Operating Sustainably

While Mundo Verde’s curriculum works to incorporate sustainability principles in an effort to transform mindsets and best practices, the operational side of the program offers an opportunity to make a more immediate impact.

“Part of the plan and part of what we’ve begun to implement first is an assessment and analysis as to what sustainability means for us as a school operationally,” Halperin asserts. “If you’re in the timber business, you know where your footprint is. If you’re in the oil and gas business, you know where your footprint is. As a school, particularly a school with leased space and preschool kids, it’s not very clear.”

While that footprint is not always easy to measure, every major contract or investor is assessed through a sustainability lens. Every aspect of the school is monitored in-depth. The packaging used for school lunches—delivered family style in reusable packaging instead of individual wrapping—is weighed to measure efficiency. The school is in the works to bring on a Washington, DC, chef who is committed to locally grown and sustainably harvested products, and recently added a sustainability coordinator to the staff.

“Part of our whole philosophy is figuring out—and this is where I think of us as a local school with a national footprint—how do you take what you’ve got and be sustainable?” Halperin asks. “If you happen to be able to move into or buy or build a LEED Platinum building, that helps. But the reality for most educational institutions, and particularly the charter school community around the country, is most don’t have that. You’re starting with probably a pretty run down, bricks and mortar, old building that the school department doesn’t want anymore.”

But that’s part of the appeal for Halperin, whose background includes many years working on



Mundo Verde Bilingual
Public Charter School

All Mundo Verde students play an important role in sorting organic and paper-based waste for composting.

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Fact Sheet: Green Strides and the U.S. Department of Education Green Ribbon Schools Recognition Award

The U.S. Department of Education Green Ribbon Schools (ED-GRS) recognition award honors public and private elementary, middle, and high schools and districts that are exemplary in three areas: 1.) reducing environmental impact and costs, including waste, water, energy use, and alternative transportation; 2.) improving the health and wellness of students and staff, covering environmental health and nutrition and fitness; and, finally, 3.) providing effective sustainability education, requiring robust environmental education that engages STEM, civic skills, and green career pathways. The award is a tool to encourage state education agencies to consider matters of facilities, health, and environment comprehensively and in coordination with their state health, environment, and energy counterparts. Through the selection of nominations to ED, states work with counterpart agencies. Schools must be high achieving in all three areas, not just one.



Mundo Verde was honored as a US Department of Education Green Ribbon School at a ceremony attended by Secretary of Education Arne Duncan and national leaders in environmental sustainability.

ED receives school nominees from state education agencies in the winter and announces them annually on Earth Day, April 22nd. The honorees are invited to a national ceremony in the summer. Criteria and guidelines for states are also published in the summer for the subsequent award cycle. Schools do not apply for the award directly to ED, but to their state education agencies. Schools must contact their state departments of education (or equivalent DoDEA or BIE jurisdictions) for information on selection. The award is voluntary and not all state education agencies choose to nominate schools.

Without new authority, funding, or staff, the U.S. Department of Education's Green Ribbon Schools recognition award has united the federal, state, and nongovernmental organization community around a common effort, generated thousands of positive media impressions for the green schools movement, and impacted millions of students across the country as schools become healthier, safer, and more sustainable places to receive a 21st-century education.

It is estimated that ED has saved the government hundreds of thousands of dollars by leveraging existing federal and nonprofit expertise and resources to advance sustainable, healthy schools and environmental education. The initiative has earned the department awards from the U.S. Green Building Council Center for Green Schools and the Center for Innovation and Environmental Leadership in 2011. The U.S. Department of Education Green Ribbon Schools recognition award and comprehensive definition of green schools have traveled as far as the Durbin climate talks, the United Nations Environment Programme, and foreign nations' education ministries.

ED's complementary Green Strides initiative uses a resources page, Webinar Series, blog, newsletter, and Facebook page to facilitate the sharing of best practices and resources in the areas of facilities, health and environment, and the critical collaborations that ensure all of our nation's schools are healthier, safer, and more sustainable. The resources page lists tools free to all schools to follow the footsteps of our honorees. The Green Strides Webinar Series provides all schools, districts, and states free informational sessions on the tools that help them move toward the pillars of our recognition award.

Source: ED.gov, U.S. Department of Education

environmental and sustainability issues for corporations around the globe.

"I wanted to see if I could contribute within my neighborhood," asserts Halperin, a long-time DC resident. "The combination of being able to do locally what I've been working on with various clients globally, and my background within innovation and entrepreneurship, led to my interest in taking a bricks-and-mortar school for young children from the ground up."

Mundo Verde has operated as a nomad in its brief existence, leasing a commercial space in the Dupont Circle section of DC in its inaugural year before migrating to a similar building in the Mount Pleasant neighborhood. The school, which currently houses students in preschool through first grade, will relocate again in 2014 thanks to being awarded a closed public school building that will ultimately allow the student body to grow from preschool through fifth grade.

Each building shares a common thread in that they are all run-of-the-mill 20th-century buildings. When viewed through a sustainability lens, some might see a lost cause, though Halperin and the Mundo Verde team are proving any building can be a laboratory for sustainability.

“We are eliminating the notion that unless we have the money to have a LEED-certified building we can’t really do sustainability,” Halperin states. “We’re putting the kibosh on that. The notion is it’s an endless process of becoming ever-more sustainable no matter where you start.”

Mundo Verde’s current student body is primarily a product of the limited space in its current location. But the appeal of reaching children at such a young age is evident.

While sustainability can be a complex subject, Halperin says it is broken down for the students in easy-to-understand terms: “Take what you really need now and save the rest for later and other people.”

“It’s pretty simple, but pretty compelling and kids get it immediately,” Halperin says. “They don’t always do it, but neither do the adults.”

Ambassadors of Sustainability

Mundo Verde is working with a local consortium of four other bilingual schools in DC to establish a joint middle-high school that would be organized around pillars of language acquisition/immersion, inquiry, social justice, and stewardship.

The leadership team at Mundo Verde is very cognizant of the fact that students will move on to new schools as they get older, and they are working to ensure that what the students learn in their early years will carry over.



“You don’t want to set kids up and have expectations of how they learn and contribute and have that be dashed,” Halperin explains. “So we’re very keen on working with other schools to keep the pathway forward, robust, and open.”

If the joint school doesn’t pan out, or students advance on different paths, part of the Mundo Verde model is ensuring that its children become ambassadors for sustainability practices as teenagers and beyond.

“The idea is that they become ambassadors for a way of learning and a way of being in relationships with others as part of a model that can be applied regardless of whatever structure or institutional framework they find themselves in, either as kids or as adults,” Halperin says.

Mundo Verde staff, students, and families work together to prep soil for a garden build day.

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