# Chapter 9
# Teaching and Learning Toward a Sustainable Future: The Sustainability Academy at Lawrence Barnes

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*On a crisp fall morning in Burlington, Vermont, a group of second and third grade students set out from their school on North Street for a field trip back in time. The students arrived at what was once the Russian-Jewish bakery, established in the 1800s by a family of Lithuanian immigrants. Down the street, another group of students headed out in the opposite direction, in search of the once essential trolley car heading downtown. A third group fanned out to explore Hyman Bloomberg's Shoe Store, while another headed toward the water, to the site of the Lake Champlain lumber port. While none of these businesses are still operating in present-day Burlington, they came back to life on this blustery afternoon. The historical reenactment of North Street's heyday was made possible by community volunteers. Students were able to speak with the bakers and shopkeepers, the recent immigrants, and the laborers of their neighborhood. The characters told the stories of their own immigration, migration, and settlement, described daily life, and answered questions from curious eight-year-olds, who wondered things like, "What does it mean when the sign says, 'No Irish Need Apply?'" Students filled their "passports" with stamps as they journeyed from a scene of workers at the lumberyard, to the home of textile workers, to a conversation with a French Canadian nurse. This thoughtfully orchestrated "learning journey" allowed students to deepen their understanding of the big idea of "change over time."*

*Imagine yourself as one of those students, where wonder drives your learning. You ask questions about your place as you explore the world around you. Ideas are*

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*planted like seeds, and nurtured by collaborative inquiry of fellow students, teachers, and community partners. Neighborhoods and schoolyards become the classroom, and the walls of the school become permeable. This is the kind of learning happening every day at the Sustainability Academy at Lawrence Barnes.*

## The Sustainability Academy at Lawrence Barnes

The Sustainability Academy at Lawrence Barnes is the United States' first sustainability-themed elementary magnet school. This chapter outlines the history of the school's transformation and lessons learned throughout this process. The Sustainability Academy at Lawrence Barnes is a small public elementary school located in the Old North End of Burlington, Vermont. In 2009, the school, formerly known as Lawrence Barnes Elementary School, reopened its doors as the country's first kindergarten through fifth grade public magnet school[1] with a sustainability theme. Today, the school is sustained by a collaborative partnership that includes families, many local community partners, Shelburne Farms, and the Burlington School District. The school engages young citizens in making a difference in their community by exploring social, economic, and environmental issues through an integrated, hands-on curriculum steeped in service learning.

As the lead community partner, Shelburne Farms, a nonprofit sustainability education center, provides primary support in the transformation of the Sustainability Academy. Shelburne Farms' Sustainable Schools Project (SSP) staff members provide embedded professional development, curriculum consultation, and collaboration on rethinking the education system, so that young people can become socially, ecologically literate, caring citizens who make choices that create a healthy and just world.

### *History*

The Lawrence Barnes Elementary School began serving Burlington's North End community in the late 1880s, relocating to its current site after a fire in 1958. The school had been slated to close for a variety of reasons over the years; most recently, in 2006, when the Burlington School Board was concerned about two related issues: the combination of an exceptionally high concentration of low-income students, and identification as a "failing school" under the 2001 No Child Left Behind Act (2008). The School Board's recommendation to close Lawrence Barnes and redistribute its students was one of several options to address the city-wide socio-economic disparity

[1] Magnet schools are public schools with a specialized curriculum focus. The term "magnet" refers to the expectation that a magnet school will attract students from across traditional neighborhood or district boundaries to serve a more diverse student population. For example, magnet schools often are designed with the intention of increasing racial, language or socioeconomic integration within a school district.

among the district's six elementary schools. This suggestion was met with outrage by the school's families and community who gathered forces, called the press, and refused to abandon a school that has long been considered "the heart" of the neighborhood. Their protests resulted in the School Board's formation of a task force to propose alternatives to closing schools. The task force was comprised of parents, teachers, administrators, and community members.

The task force on removing obstacles to the success of students from low-income families (Burlington School Board, 2006) was charged with "recommending an approach or combination of approaches, to further the achievement of students from low-income families." After several months of studying local and national models, the Task Force concluded that all students in a school with a mixed socioeconomic population fared better, especially in terms of academic achievement. Based on these findings, they recommended six alternate strategies to better serve the educational needs of low-income students, while honoring the rich diversity of Burlington's population. Possibilities included reconfiguring the elementary schools throughout the city to separately serve kindergarten to grade 2 and grades 3–5, respectively, redistricting the city Wards that dictate which school a student attends, or the option of creating magnet schools. The School Board ultimately decided to establish two elementary magnet schools, which would attract higher income families from around the city into the Old North End schools, bringing into balance the socio-economic demographics. The School Board then sought input from the community on potential themes and innovative programs that would attract new families to the magnet schools—the state's first.

## *Why a Sustainability Theme?*

Vermont has a longstanding tradition of practicing land stewardship and community sustainability. In 2000, the State of Vermont's Department of Education formally recognized this value when it included two new academic standards that apply to every student, in every subject, from kindergarten through 12th grade—Sustainability (3.9), and, Understanding Place (4.6)—into its Framework of Standards and Learning Opportunities. Shelburne Farms played a lead role in the partnership that worked on the development of these new learning standards. Both of these standards, found in the Vital Results section, address what Vermonters felt was missing in preparing students for the twenty-first century. Vital Results are learning standards that cover every subject and grade level.

While adding these new standards greatly enriched the existing framework, it became clear that teachers needed professional development and resources to effectively teach the content and ideas found in both of the new standards. To meet this need, Shelburne Farms began offering training for teachers, developing curricular resources, and supporting teachers in using sustainability and the local community to integrate school curriculum, projects, and district efforts (Box 9.1).

Shelburne Farms launched an innovative whole-school professional development model called Sustainable Schools Project (SSP) in 2001, defining sustainability as

**Box 9.1** Shelburne Farms and the Sustainable Schools Project

Shelburne Farms is a nonprofit education organization and National Historic Landmark, established in the late 1800s.The Farms' mission is to cultivate a conservation ethic for a sustainable future. The vision that informs the work today took shape in the 1970s when the Farm began its environmental and agricultural education programs.

Since that time, the organization has served as a local and international model in education. The Farm partners with organizations, government agencies, and institutions locally, nationally, and abroad to advance education toward creating a healthier and more sustainable society.

In 2001, Shelburne Farms started its Sustainable Schools Project (SSP) answering the need for professional development in pedagogies and practices that support understanding of sustainability and for a whole-school model of implementing the practices and concepts of sustainability. With the support of local and national foundations, SSP began working with K-12 teachers and developed their framework for Education for Sustainability (EfS).

The Framework suggests that students should understand that the world is interconnected, that they should know the natural and human communities in which they live, and have opportunities to make a difference or build a sense of self-efficacy. This framework has been the foundation for the partnership with the Sustainability Academy. The focus on self-efficacy and a deep understanding of the concepts of community and interdependence has proved to be a way to engage students of all abilities and backgrounds and helps them make the transfer of what they are learning in their place to new and more complex situations.

Shelburne Farms' SSP continues to work with Vermont schools as well as schools throughout the USA from California to New York and around the world from China and Japan to the Dominican Republic.

*—Jen Cirillo*

"improving the quality of life for all—economically, socially, environmentally—now and for future generations" (Sustainable Schools Project [SSP], 2001) The goal of SSP is to use the lens of sustainability to integrate the "4C's"—curriculum, campus practices, community partnerships, and collaboration. SSP staff began working with the Burlington School District in 2001, building upon the work Shelburne Farms established with the district decades earlier. This enduring public–private partnership is grant-funded, and includes private foundation support.

In 2004, the Sustainable Schools Project launched a new program with the Lawrence Barnes Elementary School to explore possibilities of connecting students to their place and building their sense of self-efficacy in their own community (SSP, 2004). This initial program set the stage for what eventually became the Sustainability Academy at Lawrence Barnes.

Unfortunately, that early program was limited by the traditional public school infrastructure that created challenges such as:

- Little integration of subjects,
- School life and community life being seen as separate,
- A focus on standardized test scores,
- A new reading initiative, and
- Little additional professional development time.

Teachers had to volunteer their own time to work on curriculum, explore community resources, and collaborate with each other. At the same time, they had to meet the requirements of a school that was not meeting Adequate Yearly Progress (AYP) under the No Child Left Behind Act (2001).

With the support of the professional development provided by the SSP, the Lawrence Barnes teachers started with small steps. They looked at opportunities to apply the lens of sustainability to their curriculum, mapped the K-5 scope and sequence, and located the Big Ideas of Sustainability (Shelburne Farms, 2004) in the state education standards. Classroom teachers participated in workshops on sustainability where they met with local resource people such as the director of the Food Shelf hunger relief program, farmers, waste managers, livable wage advocates, and urban planners. They read articles on education for sustainability and place-based education, and analyzed student work for evidence of understanding sustainability concepts.

For 5 years, with the support of SSP staff, the school continued to slowly infuse sustainability into many aspects of their practices. Families began participating in evening programs, such as book groups on sustainability themes, community-wide dinners and wellness programs, which emerged from the traditional Parent Teacher Organization (PTO). Students spent increasingly more time in the community engaged in service-learning projects such as working with the Food Shelf or neighborhood gardening projects.

In 2007, when the search for a magnet school theme began, the early successes at Lawrence Barnes prompted SSP and the City of Burlington's Legacy Project, a citywide sustainability initiative, to present a proposal to the School Board and community to launch the country's first sustainability-themed elementary magnet school. The proposal was supported by the Lawrence Barnes families and community partners, and was well received by the School Board. With great enthusiasm, it was adopted as the school's theme, and the school reopened as the Sustainability Academy at Lawrence Barnes in September 2009.

## What Makes This School Different?

The Sustainability Academy differs from many elementary schools in a variety of ways—from its story of transformation to the everyday operations. The Sustainability Academy is guided by a collaborative team of school staff, district leadership, families, and community partners who hold the school and students to high expectations for achieving sustainability goals. In addition, the school, while still part of a larger

school district, has a customized professional development plan that integrates the local resources of the greater Burlington community with teachers' own developing understanding of sustainability. The curriculum is designed or adapted using the Big Ideas of Sustainability so that it meets the needs of individual students. Most notably, the Academy has a full-time Sustainability Coach who is employed by the district to support teachers, families, and community members in pursuing sustainability. In addition, the school continues a long-standing partnership with Shelburne Farms, SSP whose staff pollinates the school with innovative ideas and opportunities from the field of sustainability and place-based education (Box 9.2).

**Box 9.2** Reflections of a Sustainability Coach

I began my teaching career 37 years ago, in a small, progressive college town, during the era of "Open Classrooms." Four classrooms were put together in the gym, along with some carpeting, bookcases, children, willing teachers, and a curriculum based on creating the "least restrictive environment for children." It was a grand experiment that lasted 4 years. What it taught me, however, endured: the power of children's voice in their own learning. As I reflect on my varied career in education—from teaching music, kindergarten, starting a private school, teaching for 21 years in Burlington's Old North End, to becoming the Sustainability Coach at the Sustainability Academy—I have never forgotten the importance of children having a "say" in their own education. Teaching children for all these years has meant collecting, embracing, and discarding initiatives, and then moving on to the next one. Through all these changes, I have been fortunate enough to have a large collection of teaching experiences to draw upon, from teaching Woody Guthrie's music to nurturing students to standing up against the closing of their school.

Teaching and coaching at the Sustainability Academy has been the most challenging part of my career because it has demanded the most from me, but it has also been the most rewarding part of my career. I could never return to the old ways of teaching isolated subjects, disconnected from the world. Education for Sustainability is a promise for the future; it is the interconnectedness and interdependence among ecological, economic, and social systems. It is teaching young children how to make a difference now, and not just when they reach adulthood. It is about living and making a difference today, and it is about linking the knowledge of place and sustainable practices with inquiry and action. Education for sustainability is about improving the quality of life for all…now and for future generations.

Is that more of a challenge than my previous years in the classroom, more demanding than any initiative to date? Of course it is! But its impact is equally significant. Education for Sustainability creates meaning—for teachers, students, families and the community—that lives on beyond the school day and long after children leave the Sustainability Academy.

*—Anne Tewksbury-Frye*

When SSP began its work with the Lawrence Barnes' community, the faculty had been asking themselves "How can we help students have pride in their place?" As the relationship evolved, they began to embrace a much larger question, "What would teaching and learning look like if the goal was to create more sustainable and healthier communities?" Today, the school and community collectively pursue a vision not commonly seen in public schools. It is one that goes beyond and includes increasing student academic achievement and balancing the socioeconomic ratio of the school.

The Sustainability Academy strives to be a collaborative of educators, families, and the community that infuses the Big Ideas of Sustainability into curriculum and campus practices. The goal is to prepare students to be responsible citizens and agents of change in their own lives, in their own community, and beyond. The staff holds high expectations for academic and personal growth for all students, and embraces the rich economic and cultural diversity of the community. SSP and the Sustainability Academy are engaged in creating a different kind of teaching and learning that meets the individual needs of the students, explores the unique attributes of place, and strives toward sustainability. Based on the SSP's definition, the school redefined sustainability as, "learning the shared responsibility for improving quality of life for all—economically, socially, and environmentally—now and for future generations."

## *Curriculum: Starting with the Goal of Sustainability*

The essential capacities and habits of mind that students develop in elementary school are essential for understanding the complexity of sustainability. Students, during these foundation years, develop the capacity to understand sustainability principles such as cycles, community, and interdependence and to build habits of mind including multiple perspectives and systems and critical thinking. These capacities and habits of mind form the Big Ideas of Sustainability that lead to a more comprehensive understanding of an ever evolving concept. Therefore, from the start, the Sustainability Academy focused on creating its own curriculum and a customized professional development program for teachers. The Big Ideas of Sustainability that teachers identified in 2004, and used to design their curriculum, have endured. Today, teachers in each grade level continue to orient their units of study, year-long essential questions, and service-learning projects around these themes. These include *community*, *cycles*, *interdependence*, *systems*, *responsibility*, *diversity*, and *equity*.

The process of curriculum development at the Academy has been based on the Understanding by Design (UbD) framework (Wiggins & McTighe, 1998), which has been a powerful part of the experience for the teachers and students. The UbD framework encourages teachers to begin the instructional planning process by identifying the desired outcomes—the knowledge and skills students will acquire as a result of instruction. After those desired outcomes are identified,

teachers design lessons and activities to help students acquire that new knowledge. The Sustainability Academy begins with the end goal of healthier and more sustainable communities, and then identifies skills, content understanding, and values students need to meet that goal. Designing this type of curriculum is a major endeavor; but the faculty has found the process to be satisfying. As one fourth/fifth grade teacher said, "I've never worked so hard; but it has never been so worth it."

The UbD process involves creating instructional units in a long-term planning process. At the Sustainability Academy, the units of study are continuously evaluated, refined, and questioned during curriculum retreats held three times a year. In addition to regular weekly meetings, grade-level teams meet for a full-day retreat with the support of the Sustainability Coach, SSP staff, and other resource specialists, to work on curriculum maps. They also infuse the themes of sustainability onto district initiatives; such as *Readers and Writers Workshop*, *Inquiry Science*, and *Positive Behavior Interventions and Supports*. They create formative and summative assessments that evaluate students' understanding of sustainability concepts, content knowledge, and skills, as well as continuing to administer traditional measures of student achievement.

The school uses SSP's Framework of Education for Sustainability (Shelburne Farms, 2001), which states that to be able to create sustainable communities, students should: understand that the world is interconnected (systems-thinking), know the human and natural communities of which they are a part (place-based education), and understand that they can make a difference (service-learning). Following this framework, the school has put an emphasis on project-based, service learning, and place-based learning. These approaches provide opportunities for students to develop skills, such as teamwork, public speaking/communication, problem solving, and decision-making.

Anecdotal evidence from school staff, community partners, and school leadership suggest that all students, including the significant populations of English language learners and special education students, are engaged and are generally doing better in school than prior to incorporation of the sustainability theme. Initial evaluation of the impacts of place-based education also indicate that English language learners become fluent in English more quickly when they are learning about local phenomena and are engaged in hands-on learning.

## What Does Education for Sustainability Look Like in an Elementary School?

Developmentally, most 5-year-olds lack the integrated reasoning skills to fully understand complex issues such as the systems involved in climate change or the factors that threaten rainforests. Yet, many programs for young children are structured around global environmental catastrophes. According to Sobel (2004),

teaching young children about these threats and tragedies before age 10 can instill in them a fear of, rather than love for, the planet.

For students to develop a connection and compassion for the world, they must first experience and explore its wonders in a developmentally appropriate way. The curriculum at the Sustainability Academy provides students with firsthand experiences that connect them to the natural world that sustains them—the food, the fiber, the green places. As their affinity for the world around them deepens, they become stewards and agents of change. As the descriptions below illustrate, the curriculum is integrated across all six grade levels.

## *Kindergarten and First Grade*

In kindergarten the children focus on a year-long theme of community. They explore who and what makes up a community, how these communities are dependent on each other, and how they can help the natural and human communities in their neighborhood. On Friday mornings, regardless of the weather, they head out to their "Outdoor Classroom," past the playground and the sandboxes, and arrive at the "Food Forest," where fruit bearing bushes and trees grow.

In their "Explorer Backpacks," they carry field guides, a journal, water, and science tools for up-close viewing. The treasures found in the schoolyard include earthworms, insects, and newly formed blossoms they cannot yet identify. Hands dig under the leaves looking for new things to investigate or bring back into the classroom. They sit down on tree stumps, sketching out the details of their latest discovery. In addition to learning about their community, the students are discovering the world and developing the understanding that what they learn in their own schoolyard can prepare them for larger and more complex communities.

The first-grade students build on their understanding of communities as they begin to study cycles. Each spring in Vermont brings maple-sugaring season. Sugar makers tap the maple trees and collect sap during a brief window of "just right" conditions that usually lasts about 6 weeks. Sugar makers depend on this spring crop to help carry them through until the next year. The first graders at the Sustainability Academy learn about the Vermont maple sugaring process as part of their year-long theme of cycles.

On the final day of this unit of study, classrooms and halls are filled with the fragrance of maple treats, baked by children to sell at the Maple Festival. The rooms are abuzz with older students who have come to the festival, where first graders demonstrate and act out the steps of the sugaring process. Other students hold a syrup taste-test, share sugaring legends, and paint maple leaves on attendees' faces. As part of this unit of study, students also learn about the link between the natural and economic cycles in the maple industry, by exploring student-generated questions like: "What happens after the syrup is made?"; "How does the farmer sell it?"; and "Who gets the money?"

## *Second Through Fifth Grade*

At the Sustainability Academy, multiage classrooms in the second and third and the fourth and fifth grades allow students to build deep relationships with their teacher, and for the curriculum to spiral from year to year. These upper elementary students focus on building their understanding of the Big Ideas of systems, interdependence, equity, responsibility, and diversity.

In second and third grade, students explore the theme of systems and interdependence, including units on ecosystems and (human and natural) community change over time. Students also spend 6 weeks studying the systems of the human body and health issues associated with those systems. They culminate their exploration with a collaborative research project of their choice, and then share their learning with families and community members during the "Health Fair."

The hallways are lined with student-staffed booths piled with surveys, pamphlets, give away items, and experiments and challenges. Students display their knowledge and educate the public on topics such as: "Which is better for you, bottled water or tap water?"; "What are the best hair products for your hair and why?"; "Why is it so difficult to stop smoking?"; or "When is chewing gum good for you?"

By fourth and fifth grade, students have practiced stewardship on campus and around the city and immersed themselves in learning how different communities address environmental and equity issues such as food access, immigration, and water quality. They have become active citizens who understand how local government works, and how to successfully use their voice to effect change.

One year, fourth and fifth grade students at the Sustainability Academy met weekly with peers from Champlain Elementary School in a project they titled, "Cross Town Communities." All together these 150 students worked to make their neighborhoods and the city a better place to live. Their inspiration for this unit was a guide written by Shelburne Farms called, *Healthy Neighborhoods/Healthy Kids* (Shelburne Farms, 2007).

Students worked in small groups on self-selected topics from the "Quality of Life Index" created at the launch of the project. They developed report cards used to check their neighborhoods' safety, health of green and play places, water and air quality, and community access to essentials such as healthy food. They took on adult-caliber challenges, such as handicap accessibility of the city's schools where they played an integral role in getting a ramp and elevator installed at the middle school. They created sketches to lobby the Department of Public Works for wider sidewalks and additional speed bumps to slow traffic. One group compared small markets in a neighborhood to assess the availability of fresh fruits and vegetables to families without transportation. At the end of the school year, these 9 and 10-year-olds held a community-wide exhibition at City Hall sharing their work and successes.

## *Evaluation*

Since 2001, SSP and the Burlington School District have contracted with an outside evaluator, PEER Associates, to assess promising practices in professional development,

student outcomes, including stewardship behavior and engagement in learning (linked to achievement), and program staying power. SSP, along with several other programs, is part of a national partnership, Place-Based Education Evaluation Collaborative (PEEC). The PEEC evaluation results show that, in general, place-based education transforms school culture, connects schools and communities, invites students to become active citizens, and energizes teachers (Place-based Education Evaluation Collaborative, 2004).

## Conclusion: Essential Elements for School Transformation

The development of the Sustainability Academy at Barnes has been a transformative process that has changed the community and the school district. The evolution of the Academy illustrates how a school and a school district can be reoriented to address sustainability. The Academy is a replicable and scalable model that involved four key school transformation elements. Those elements are described in this final section.

### *Vision and Leadership*

A consistent leadership team is critical to the success of any school transformation. Without shared vision, values, and effective communication, the school mission cannot be realized. Leadership has been one of the most significant challenges in the story of the Sustainability Academy. In 2005, the PEER Associates' evaluation of SSP at Lawrence Barnes cited frequent teaching staff and leadership turnover as a concern. Since SSP began working with Lawrence Barnes in 2004, there have been three SSP Coordinators and three principals. At the same time, all but two of the original teachers left and were replaced. There have been many positive contributions from all of these individuals, but the lack of continuity has prevented evolution of the school culture, impeded development of long-term goals, and hindered the school's progress toward realization of the original vision for the Sustainability Academy. Despite this challenge, the Sustainability Academy has still made significant progress in several key areas.

### *Professional Development and Coaching*

In 2009, when the magnet schools were being launched, the Burlington School District created the new position of Sustainability Coach to support teachers and to collaborate with the SSP staff. This position was intended to be an advocate in both the school and community, coaching teachers on using the lens of sustainability, supporting families in their understanding of what this means for a K-5 school, and working with community partners who are leaders in sustainability.

The district uses a coaching model for other disciplines including literacy, science, and mathematics and has found that this model has been effective in building teachers' capacity in particular pedagogies and content areas.

Shelburne Farms' SSP provides a majority of the professional development, which is tailored to the school's unique location, population, and resources. The professional development supports teachers' acquisition of content with the lens of sustainability and instructional practices that engage students in their community. SSP staff work directly with the classroom teachers to model instructional practices.

SSP staff and the school's Sustainability Coach offer a series of study circles that use professional learning community models and protocols. The study circles are designed to be reflective and offer teachers the chance to have collegial conversations about their practice and student work. This is a true luxury for many teachers in public schools where there is little time for teachers to talk to each other or to reflect on their own practice.

## *Community-Wide Collaboration*

Schools are often isolated from the rest of the community. Students enter the building in the morning and return home each evening to their families and the community with little information shared about what happens there each day. The Sustainability Academy has offered programming that invites the community into the school. In addition, students learn in the community. They can frequently be found planting and tending the school's many gardens, interviewing shop owners near the school, presenting at community forums, or investigating a pond habitat.

The school had often held community dinners in the past, but has now reoriented those to fit them within the context of sustainability. As a result, a new focus on presenting student work related to the Sustainability Big Ideas in the curriculum, such as healthy and local foods and community partners, has emerged. For example, one such community dinner event featured first graders presenting their food chain artwork and reading their reports on animal and plant life cycles, farmers holding fresh vegetable taste tests, the county's solid waste department raffling a home composter, and students making and serving a locally grown feast. In conjunction with the community dinners, the SSP started family and community book groups using the Northwest Earth Institute's discussion courses. The book groups and the dinners have become a fixture in the school and community.

To further involve the partners and families, SSP established a "Stewardship Committee" charged with supporting the school in reaching its vision. The Committee is made up of teachers, staff, school leadership, district staff, families, and community partners. This group addresses issues faced by all schools such as academic achievement equity, in addition to ensuring that education for sustainability is being pursued. They advise the school leadership, make recommendations, and support the school in making changes.

Program evaluation results have consistently shown that one of the most critical and enduring elements of the Sustainability Academy model is the development of partnerships. Community partnerships provide support for student learning, campus improvement efforts, school transformation, and innovation. The collaboration happens both near and far stretching all the way to Asia. Through Shelburne Farms' partner network, the Sustainability Academy works with schools in the Dominican Republic, China, and Japan, as well as in nearby Vermont towns. Teachers and staff participate in learning journeys to innovative schools and programs to exchange ideas and practices related to education for sustainability.

## *Sustainability Practices and Culture*

Campus and facilities management practices at the Sustainability Academy are evolving to incorporate sustainability. This includes healthy cafeteria offerings, school-wide composting, green cleaning products, schoolyard gardens, habitat restoration, and geothermal heating and solar electricity generation. The Burlington School District Food Service director is a leader in the national Farm-to-School movement and he and the school's cafeteria staff are champions of local, fresh, and seasonal foods. For example, daily, they offer breakfast, a fresh fruit or vegetable snack, lunch with a salad bar, and an after-school snack for all students. The teachers have been part of several statewide food education initiatives and have integrated food, farming, and nutrition themes into the curriculum and campus initiatives.

The pace of campus infrastructure changes may seem slow and can sometimes feel frustrating, but an essential part of education for sustainability is the application and transfer of new skills on the campus and in the community. For example, as students learn about life cycles of insects, they plant a pollinator garden; as they learn about how communities make changes, they are able to do so in their school.

All of the elements, outlined above, have a synergistic impact when they are applied collectively and thoughtfully to a school. The result is not a new initiative or program that must be added to an already overcrowded curriculum. Instead, sustainability can be a unifying lens that gives purpose and meaning to education. When the goal of education is to create healthy, sustainable communities, rather than to compete for limited resources in a global society, teaching and learning fundamentally change and teachers and students act and feel differently. Education for Sustainability has the promise of transforming schools and society toward a better future for all. In the words of the second graders at the Sustainability Academy: "Sustainability means if we all do a little it will help a lot."

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