

Fertile Ground: Growing Food, Community, Cultural Connections

Author: National Gardening Association Staff

When Massachusetts parent and environmental consultant Catherine Sands learned that a garden was slated for her daughter's rural elementary school, she saw an opportunity. Why not use the plots as a springboard for enticing students to eat fresh food, connecting them to diverse communities, *and* introducing them to local aspects of food systems? A key step, advised organizers from the [Edible Schoolyard](#), is to have a principal on your side. The administrator at the elementary school in Williamsburg agreed that a pilot afterschool project made sense *if* a teacher was willing to test the waters, too.



Kindergarten teacher Sherri Marti had already discussed the idea with Catherine. "I wanted all children to have the opportunity to have garden – the perfect hands-on learning experience – and to share community farming traditions." The women also shared a key concern. "We talked about students' isolation," says Catherine. "We were just 25 minutes from Holyoke (an urban area) but had no real paths to help the kids connect across race and class." Outreach to a grassroots urban gardening group helped create some stepping stones, and the program dubbed Fertile Ground was born.

Garden Mentors Bridge Cultural Communities

Early on, the women contacted [Nuestras Raíces](#), a community organization that supports celebration of Puerto Rican culture through urban gardening, farming, and youth leadership in nearby Holyoke. Their question: Could the grassroots group teach the school community how to organize around growing and celebrating healthy food? The deal: The organization's high school youth leaders would serve as garden guides and mentors. In turn, the rural school community would respect the teens' skills and knowledge. "It was a real shift in dynamics to have urban low income urban kids paid to teach rural middle class kids," says Catherine. (The program was funded by small local foundations and individuals with deep pockets.)

Youngest Students Explore Puerto Rican Community and Flavors

To create a meaningful context for meeting with the mentors, kindergarten teachers integrated studies of Puerto Rico and geography into the social studies curriculum. Now every year they meet those learning goals – and pave the way for building food, farming, and cultural awareness – by taking all kindergarteners on a bus to visit the urban community farm at Nuestras Raíces. This includes a lunch stop at a local Puerto Rican restaurant to sample the fare and a visit to the greenhouses and community gardens. "This trip helps to make a concrete connection for our young students' study of culture," says Sherri. "Nothing beats the experience of seeing, hearing and tasting those things in an authentic setting. Children sitting in the courtyard of Mi Plaza are much more likely to try the yummy rice and beans and then be excited about growing those beans in the school garden. As they walk through the city to visit the community garden, they absorb the sights and sounds of a community different from their own but connected by the shared experience of gardening."

Urban Youth Help School Gardeners Grow

Teen visits to the elementary school took place over a five year period. The mentors, many of whom stuck with the exchange for the duration, took their charge seriously. They trekked to the elementary school for an annual workday. In the early days, they led the charge to build and fill garden beds. Ever eager to teach the younger kids, they also created after school garden games and other learning experiences. What's more, the youth nurtured language bridges as they worked with the youngsters. "They also decided on larger projects they wanted to do, such as putting in a water system," says Catherine. "Then we'd raise funds and build partnerships for these."

Fertile Ground

Over the years, Fertile Ground has grown from a single school pilot program to a consulting group able to "empower schools and families to make smart food choices, and to work together across race, class, and difference, improving their communities through school gardens, food celebrations, and caring for the land." Intrigued? Learn more or contact Fertile Ground staff through the program's [Website](#).

When the mentors suggested a mural project in the winter, the art teacher, parents,



and kids met to generate words, poems, and drawings that captured their green cultural experiences. The teens then used these to create a unifying design and worked with the school community to paint it onto an outside school wall. "The mural was beautifully designed by the high school students, who used the children's drawings," says Catherine. "It depicts a bus on the road from the elementary school to the urban farm, gardens in both locations, children tasting Puerto Rican dishes, and images of the culture's traditional creation myth."

Creating Related Curriculum

Inspired by the teaching potential of the garden and cross-cultural experiences, teachers of all grades have built related curriculum.

Firsthand First Nations Lessons

Third grade classes started with a traditional "three sisters" garden. Catherine put the teacher in touch with Haudenosaunee farmer Rowen White, who studied polyculture and traditional crops of the region. "She talked with students about growing up a Native American in this country, and dispelled some common myths," says Catherine. "It was great for students to begin to see that Native American

culture is alive and well around us, but not necessarily in the ways we expect to see it."

Lesson Modeling and Aromatic History

Limited by demands on their time, the teachers asked for someone to collaborate on developing curriculum to support their teaching goals and frameworks. In response, Fertile Ground raised funds for an educator, Hope Guardenier, to go in a day a week for 24 weeks. On each visit, she spends 40 minutes per grade facilitating garden-related lessons. Teachers join in, getting professional development points for doing so. Meanwhile, students sample fresh fare as they learn through experience and inquiry. In one example, as fifth graders study government and other aspects of Colonial times, they also look at life through herbal studies. They grow plants such as mint, lemon balm, sage, bee balm, rosemary, and basil, and then send them to kitchen staff to use as teas and seasonings.

Oral Histories Create Enduring Links

Sixth graders typically interview elders as part of an oral history unit. Last year, with the support of Fertile Ground, a University of Massachusetts anthropology student taught the youngsters how to conduct ethnologies: the study of cultures, past and present. With additional support from a Tufts Health Plan grant to promote intergenerational gardening, youngsters learned from senior members of the Grange (a farm family organization) about community food traditions such as jam making and maple sugaring. Those connections prompted students to help create a wheelchair accessible intergenerational garden at a local church. Sure, nutrition and social studies goals came to life, but that's not all. "We've seen that building relationships helps build health," says Catherine.

Peace, Justice, and Food

The same batch of students also took a path toward peace. "We thought that to build in and create a nice loop, we wanted to give kids more critical thinking about race, class, and difference," explains Catherine. A group of young people in her area who conduct school-based trainings for the [Help Increase Peace](#) project offered to support the sixth grade peace studies unit. The visitors helped the preteens experience new ways of looking at the world and writing about it. "Maggie from our staff joined in to make connections between the peace training and our food systems studies and exchanges," says Catherine. "This provided a larger context and meaning for the garden curriculum." As an example, after students brainstormed a list of the roots of violence, they participated in activities designed to reveal links between food access, hunger, and peace.

All elementary teachers can now draw from a curriculum toolkit compiled by a local university student. It features all the lessons developed for the project, enabling educators to plan ahead and see how this type of theme can build from year to year.

Celebrating the Harvest

Each year, as time nears to reap what they've raised, students and teachers prepare for a culminating harvest festival and feast. They choose garden-inspired recipes and consult with the food service. (Fertile Ground provides equipment, training, and logistical assistance to help school cooks use produce from the school garden and local farms.) Two days before the event, youngsters, parent volunteers, and school staff use hotplates and the school kitchen to create nourishing dishes such as squash soup, pesto, tortillas, pirogis, red popcorn, roasted pumpkin and sunflower seeds, collard torte, green salsa,

and herb teas. As they do so, the young farmers come full circle with their own mini food system: sharing with the community what they've sown, grown, harvested, and cooked.

How They Grew

According to Catherine, there is little question that the students gain a good sense of where food comes from and what's healthy to eat. "Studies indicate that children need approximately ten to fifteen tasting opportunities to change and improve eating habits," she explains. "The garden provides exposure to fresh fruits and vegetables, and the kids taste all the time. So when the cafeteria serves pesto made from garlic and basil grown in their garden, the children eat it."

The schoolyard plots also provide a context where fellowship can flourish. "It's a neutral ground where students make connections to parents, seniors, and youth from another neighborhood and culture that might otherwise not be likely." Teachers plant the seeds for social development from the start. In the garden, students have to work on teams to accomplish tasks; in the process, they must figure out how to work together.



Harvesting Insights from Student Photos and Journals

That's what the adults have to say about student gains, but Catherine wondered what students might reveal about their own learning. She, her staff, and educators from the University of Massachusetts conducted an innovative research project to uncover that. They wanted to know what fifth graders who participated in six years of hands-on garden and partnership experiences were thinking and learning about the garden, food systems, and health. The researchers worked with teachers to design participatory research using a method called PhotoVoice. They gave 16 fifth graders cameras and asked, "If you were to teach kindergarteners about growing food, what would you want to include?" Each week, a university student intern helped students snap photos related to current curriculum topics and had them journal about their pictures. Students later helped choose photos to discuss and display.

Yes, students revealed their knowledge of why it's important to have good soil or what it takes to nurture a strawberry bed. But Catherine explains that there was more. "It can be profound because bigger truths come out, such as how families who work in the summer garden develop a sense of community." When the group put the evaluation project, called Snap Peas, on exhibit at the library, they were happy to see the turnout of community members. The young experts explained their experience to visitors. Some of the photographers then travelled with the exhibit to conferences and showed adults how to use PhotoVoice. A group also went to the Boston statehouse where they discussed the value of farm to school projects with the secretary of education. Through the exhibits and visits, says Catherine, students felt that their work cultivating food was valued. To learn more about the research and its outcomes, link to [the report](#).

Securing Support and Funding

How does an organization or group of interested parents and teachers pave the way for a sustainable garden-based education program? Catherine suggests starting slowly, building partnerships, securing small grants, and thinking about how to make the program community based and embedded in school policy. She also points out that small steps can catalyze key changes. "A few years ago, after we'd raised funds through small grants, the school principal suggested a modest line item in the school budget for the garden." Then a couple of years later, the school committee argued that they'd need to earmark at least \$5,000 so they could keep a garden educator. "These were a series of small but important policy changes," says Catherine.

Fertile Ground raised money to pay the rest of the \$20,000 needed. The organization also coordinates volunteers, writes grants, and helps the school committee reach other partners. But Catherine recognizes that to catalyze a truly sustainable effort, other support structures need to be in place. To that end, Fertile Ground is tapping parents interested in connections between food and learning, emotional health, and related issues to form a school wellness committee.

Advice

Catherine offers some suggestions to others wanting to dive into a food systems project like hers: "Start small. Think about the value in slowing down and focusing on something tiny in the soil." She also urges educators to start engaging students in their younger years, when it's easier for both teachers and parents to carve out time, and to involve more hands by securing commitments from volunteers.

She points out that teachers need time to develop connections between food- and garden-related activities and their curriculum frameworks, but that time is always at a premium. "This kind of thing can and needs to happen during professional development," says Catherine. "Those involved in this type of learning know that it won't hurt test scores and might even improve them." She contends that the more often farm- to-school programs can document this, the less resistance administrators will have to testing the waters.



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