LEARNING GARDENS AND LIFE'S LESSONS

In this chapter we establish learning gardens as legitimate academic venues through surveying national model programs and exploring theoretical frameworks that help locate and explain the learning that occurs in the learning gardens. While learning gardens have emerged as a popular school-level activity, lacking a thorough theoretical framework, they risk fading away as yet another fanciful educational trend.

While we ground learning gardens as rigorous academic venues that enhance learning, we emphasize ways in which they shift the underlying metaphorical orientation of modern schools. Students, teachers, and communities use learning gardens as pathways toward sustainability education at many levels, moving toward partnerships that link life with learning, schools with neighborhoods, neighborhoods with bioregions, and nature with culture. Below, consider students' quotes about their experiences in school learning gardens.

It is important to listen to nature because nature is so beautiful to look at! Why shouldn't it be just as beautiful to listen to?

(3rd grade student)

Today we tasted rainbow chard. The dark green leaves tasted kind of bland but the yellow or red stems tasted really good—kind of sweet in a really cool way. They also tasted fresh. We also tasted a kind of yellow flower called *nasturtium*. It had a dark yellow center and the yellow part was sweet and the red part was spicy. I also watched a spider rebuild its web.

(4th grade student)

The Learning Gardens is a time to be in your own little world. Letting your imagination go wild. Planting dreams in the ground and see them grow. If I can do this ... take care of a plant, then I can see that I can take care of anything. I can take care of myself and help myself and others.

(6th grade student)

"When we try to pick out anything by itself, we find it hitched to everything else in the universe," wrote John Muir (1911). As seen in the student voices above, Muir's observations are manifested daily by students sensitized in ways that only nature teaches: these third, fourth, and sixth graders are learning to observe, to taste, to smell, to listen, to touch, and to care. They are able to discern and differentiate, imagine and connect, all the while learning about life directly from soil and nature in the gardens that they can step into right outside the doors of their school. One student joyously reminds us that nature is more than just a visual phenomenon to be seen. Beyond her suggestion that we also listen to nature is a nuanced understanding of the depth of relationship possible among humans and the environment. A second student deliciously describes tasting a new vegetable—rainbow chard—using fine details to distinguish among various parts of a new plant. Increased exposure to novel foods can improve children's eating habits; moreover, this quote demonstrates cultivation of exquisite observational skills in tandem with new taste buds. Another student makes a beautiful metaphorical leap, describing "planting dreams in the ground and [seeing] them grow." This student links the skills that he is learning in the gardens with the life skills needed for care of self and community. These brief quotes from students in learning gardens show multiple levels of learning and meaning making beyond memorization of facts and figures. For example, in Figure 2.1, students draw upon their study of geometry as they lay out plants in a hexagonal planting pattern. In contact with the living world in learning gardens, these students are broadening their understanding of life's mysteries even as they gain academic skills.

This is in stark contrast to much of education vis-à-vis schooling where teaching and learning are enclosed within the four walls of the classroom supported by wood and bricks, steel and glass, separating the exterior of the building from the interior. The physical structure of the building is interrelated to an overall educational paradigm, transmitting a hidden curriculum that often ignores life and is disconnected from the surrounding community.

To counter the manifest and literal lifelessness of schools and classrooms, since the early 1990s an emerging national movement in the United States has been focusing on shaping the school grounds hitherto covered with asphalt or manicured lawns into green schoolyard habitats and school gardens, a prototype of which is seen in Figure 2.2.

This resurgence of interest over the last 20 years has resulted in the establishment of thousands of school gardens across the country. Given the



FIGURE 2.1 Digging and planting



FIGURE 2.2 Students planting in a newly transformed garden: a year prior, this site was an abandoned school lot