



© Matt Bibeau

Learning Suitable to Life and Livability: Innovation through Learning Gardens

By Pramod Parajuli, Ph.D., Portland State University

We are not human beings having ecological experience;
we are ecological beings having human experience

— Thomas Berry, author of *The Great Work*

Ecological educator David Orr recently commented to me that “the ecological crisis is in every way a crisis of education” because the disorder of ecosystems reflects a prior disorder of mind, an imbalance in the values and world-views we have accepted as an industrial society. He also aptly urges us to consider that this is not only a problem *in education* but one *of education*. I agree. If it was only an issue in education, we could address that by changing curriculum, or by offering professional development for teachers. The issue is about education itself, the underlying values and beliefs we hold dear about education. Why do we teach? And what do we learn? Indeed, as readers of this journal, you and I are interested not only in finding more effective learning strategies but in exploring the very bold and daring questions: What should learning be for? Both in content and process, what kind of learning will give us a satisfying life not only for humans but also for other species?

Please join me in thinking about three L-words: **life, livability and learning**. These are the precise three words we at the Portland International Initiative for Leadership in Ecology, Culture and Learning (PIIECL), a graduate program at Portland State University, have been incubating for the last four years. To find answers, we work at the university and also with Portland Public Schools and the community. As teachers, researchers, scholars and activists, our faculty and 70-plus students want to effectively engage in making this world livable for humans and the more than human world. We probe deeper because we are convinced that an ecologically sustainable world also needs to be bio-culturally diverse and socially just.

In the same spirit, we are currently creating “learning gardens” in eight Portland Public Schools. The goal of Learning Gardens is to provide food- and garden-based education for K-12 children and youth. Through these learning gardens, we seek not only to improve academic achievement, multiculturalism, and healthy food habits but also to promote development of a whole child by cultivating self-esteem, motivation, sense of purpose in life and self-efficacy. We focus on garden- and food-

based learning because growing gardens, harvesting food and eating are perhaps the most primal, intimate and sensuous ways we connect to the rest of humanity and nature. We have also found that subjects such as science, math, social sciences and humanities can be enriched through garden-based learning.

The issue is about
education itself, the
underlying values and
beliefs we hold dear
about education.
Why do we teach?
And what do we learn?

The learning gardens movement builds on the convergence of two important forces in Portland. First, there is the resurgence of local food economy and culture in the greater Portland area. Not only is the number of grocery stores that buy and sell organic and locally-produced food increasing, farmer’s markets are also on the rise. I am inspired to note that in Oregon the number of farms has risen from 26,753 in 1974 to 40,033 in 2002, the latest year for which figures are available (*NY Times*, January 4, 2006). This upswing is primarily due to consumer demand for local, organic and seasonal foods. Secondly, Portland is increasingly becoming a global village where diverse communities from around the world are bringing their own

agro-ecological, culinary and healthcare traditions. However, Portland’s children, especially those from low-income and multicultural backgrounds, could do much better academically and eat healthier food. Inspired by these trends and considering the growth of the whole child, we are designing these learning gardens such that they can simultaneously:

- **promote multicultural learning** as represented in the diverse agro-ecological and culinary traditions of parent communities;
- **enthuse interdisciplinary inquiry** in math, science, social sciences, arts and literature;
- **foster intergenerational learning** where PPS and PSU students, teachers, and parents become co-learners;
- **cultivate multisensory learning** through not only head but also hand, heart and all other senses; and finally,
- **enhance local food economy and culture** by growing and consuming local, organic, seasonal (when possible) and sustainably produced foods.



Hh Ii Jj Kk Ll Mm Nn

While each of the eight Portland Public Schools are creating their own learning gardens and gradually integrating food and gardens in their curriculum and Oregon Benchmark standards, we serve their curricular and professional development needs through two learning garden facilities. JEAN's Urban Forest Farm is a two-acre rented facility surrounded by native forest and adjacent to Johnson Creek. In addition to a one-acre permaculture garden, it hosts an outdoor kitchen, cobb oven, and a watershed restoration project. Our second facility is located next to Lane Middle School in Southeast Portland. A joint project of PSU and the City of Portland, Learning Gardens Laboratory (LGLab) is a 10-plus-acre site, with full garden facilities including several greenhouses and an adjacent community garden.

Both LGLab and JEAN's Farm have begun to host site visits by children and teachers from local elementary and middle schools. It is our wildest dream to equip JEAN's Farm and the LGLab to provide K-12 students, teachers and parents with direct experiences in farming, multi-cultural agro-ecological and herbal traditions, cooking, sustainable and permacultural design, sustainable energy technologies, and native plant and watershed restoration. Most uniquely, these two sites also provide Portland State University students opportunities to engage in a variety of activities. They learn how to design, garden, develop curriculum, outreach to multi-cultural parent communities, and conduct ethnographic research on local food economy and food cultures. These opportunities are available for PSU students either as site coordinators of the learning gardens project or as part of their community-based learning experience (CBL). Portland State University is nationally noted for CBL opportunities through which students take a four-credit course and spend 20-30 hours working with a community organization. Each academic year more than 200 PSU students contribute their CBL hours in school-based learning gardens.

By considering every stakeholder as a learner (and co-learner) and seeking to address their learning needs simultaneously, we are incubating a unique and a mutually beneficial partnership between Portland State University, the City, Portland Public Schools and the larger community. In order to offer a truly diverse learning experience, we are connecting and networking with Portland Community Gardens, Tryon Life Community Farm, 47th Avenue Farm, Luscher Farm, Zenger Farm, and Growing Gardens.

Growing gardens, harvesting food and eating are perhaps the most primal, intimate and sensuous ways we connect to the rest of humanity and nature.

While these organizations are championing, educating and popularizing the notion of sustainable food economy and culture, there are hundreds of family-run farms that grow organic and sustainably-produced food in the greater Portland area. They are at the core of this emergent local food economy and culture. As schools begin to shift towards purchasing their food locally, these farming enterprises will be an integral part of the emergent farm-to-cafeteria network. Through programs such as Food-based Ecological Education Design (FEED) and Learning Gardens, we hope to boost this demand from the bottom up and prepare a new generation of growers and consumers of food that is locally and sustainably produced.

In closing, let me bring you back to those three words: **life, livability and learning**. Born and raised in a peasant family in the remote Nepalese Himalayan foothills, I am duly inspired by Kentucky born and raised farmer-poet, Wendell Berry, who aptly urges us to consider food as an agricultural act. I want to add: "agriculture is an ecological act" and "ecology is an act of learning." In order to facilitate "earth-body" learning, we consider soil and gardens as the primary site for our multisensory awakening and being. If there is a crisis in education or one of education, we are addressing that by acting and learning ecologically and multiculturally. One of the inspiring teachers from Buckman Elementary School, Tim Hahn, speaks well of our sentiment:

"FEED is a great starting point for children because it really addresses more than just the science and more than just the food. I mean it is really about our culture and questioning the way we want to live."

A learning that is suitable to life and livability might have just begun in Portland. You might be a student, a teacher, a parent or an inhabitant of this region. I want to welcome you to join us in this fascinating educational journey. ✨



© Matt Bibeau

Pramod Parajuli, Ph.D. is a professor at Portland State University. He co-founded (with Professor Dilafruz Williams) the Portland International Initiative for Leadership in Ecology, Culture and Learning (PIIECL), an interdisciplinary graduate program at PSU, and serves as its executive director. Innovator of the concept of learning gardens, he also directs the FEED and learning gardens projects.

For further information, visit, www.piecl.pdx.edu and www.feed.pdx.edu.



Portland State University students enjoy learning and teaching at JEAN's Urban Forest Farm.