Boston Schoolyard Initiative

Designing Public Schoolyards for the 21st Century
State of Schoolyards: 1995
Mission Statement

- The Boston Schoolyard Initiative is dedicated to transforming Boston’s Schoolyards into dynamic centers for learning and community life.
1995: Mayor Accepts Task Force Recommendations

Boston Schoolyard Initiative is Born

Features Include:

- Public/Private Partnership
- Civic Engagement & Local Empowerment Model
- Schoolyard as Educational & Community Resource
- Sustainability of Sites & Programming
State of Schoolyards 2007
BSI FACT SHEET

- 70 New Schoolyards Constructed
- Every Neighborhood & Grade Level
- 125+ Acres Added to Urban Open Space
- Nearly $20 Million in Public/Private Funds
- Safe Recreation & Outdoor Classrooms
- Increase in School/Community Partnerships
- Thousands of Volunteers Empowered
- BSI Recognized National Leadership Role
Participatory Design Process
Outdoor Classrooms – Designed for Teaching and Learning
Tools for describing Planted Areas - Urban Meadow & Sample Woodland

Urban Meadow

What is an urban meadow?

One of three outdoor classroom planted areas, the urban meadow contains low perennial plants typical of the spontaneous vegetation found in urban environments.

Sometimes described as weeds, these hardy plants are important in the urban ecosystem, helping filter water, preventing soil runoff, and providing habitat for insects and food sources for butterflies and birds. Growing from the ground up every spring, the urban meadow offers the chance to see dramatic change over a single year, and illustrates ecological dynamics from year to year.

Design recommendation: a large mass island bed of 100 sq. ft. or more in area, rather than a bordering strip bed. The island may be mounded for topographic interest. Include secondary pathway for circulation within the meadow to allow students close observation without damaging plants. Provide flat stones or log slices to turn over to find worms and bugs.

Maintenance: By late fall many urban meadow plants may be up to three feet tall, offering seed pods for investigation and providing insect habitat. At the end of the season, or very early next spring to maximize education use, the meadow is mowed or weed-wacked down. Spring growth emerges from root stock and naturally set seeds.

Educational use:
- Seed pod collection
- Identification of plant parts and growth processes
- Butterfly and insect habitat
- Observation of seasonal change
- Vocabulary building
- Identification of common urban species:
  - plant mix and plant location naturally change from year to year demonstrating ecological systems

Outdoor Classroom Area:

Sample Woodland

One of three outdoor classroom planted areas, the sample woodland displays examples of vegetation found in New England woodland ecosystems.

To encourage horticultural success and demonstrate the interrelationship of plant species, the sample woodland design should build a sense of place by a mass, preferably mounded to contain the trees, rather than a flat border strip, (150 sq. ft. minimum)

Selection of smaller varieties of trees and shrubs allows for more diversity in limited spaces and less maintenance as these plants mature.

The herbaceous layer, protected from the sun, contains understory and shade garden species. Plant in a heavily mulched soil similar to a naturalized forest litter bed to hold moisture and provide microhabitats for insects and worms.

Design of paths with stepping stones or log slices provides student access for observation while protecting plantings.

Outdoor Classroom Area:

Sample Woodland

Trees - deciduous
- (medium & small)
- Dogwood, Kousa
- Common Smoke tree
- Crabapple
- Paperbark Maple
- Japanese maple
- Star Magnolia
- Pin Oak
- Honey Locust
- Tulip Tree
- Apple, Roxbury Russet
- Pear, Clapp River birch

Trees - conifers
- White Fir
- White Pine
- Black Pine
- Eastern Arborvitae
- Incense Cedar
- Juniper

Shrubs
- Witch Hazel
- Box-wood
- Pussywillow
- Shadbush Serviceberry
- Dogwood
- Red & Yellow twi
- Winterberry
- Rosa Rugosa
- Bayberry
- Blueberry
- Fothergilla

Herbaceous
- Ferns
- Solomon seal
- Lamium (dead-nettle)
- Oxalis (wood sorrel)
- Club moss

Teachers observing insects in forest litter bed with fallen logs and thick wood chips

planted by
planting concept consultant Peter Del Tredici
www.edischools.com
Web Links & Workbook

Components of the Outdoor Classroom

Outdoor Classroom Area:

Student planting beds: for growing and study of annual plantings.

Teachers and students choose how to use the hands-on student planting beds. One of three outdoor classroom planted areas, typically raised or containerized planting areas, intended for flexible use for school class and/or after school groups.

Design considerations: 3 foot width allows easy access of full bed by younger students, length could vary from 4 to 8 feet or longer based on site and use. Height 18" - 24" high for easy maintenance and observation. Locate in fenced in area, or other protected schoolyard location.

Provide near-by water source. Specify soil that is safe for growing edible crops as future use may include food production. Soil depth of 24" recommended. Provision for removable covers extend seasonal use.

Outdoor Classroom Area:

...a place for hands-on activity, for "making a mess", and for discovery that is not possible inside...

The work and experiment area is a place for students to explore physical concepts, to pour water and watch the process of erosion, it may contain earth materials to sift, gravel and dirt piles to dig, or mulch piles to find worms.

In outdoor classroom design the area may have a flat stone work surface, or table, or low tills that contain different materials, (pebbles, sand & silt, or soil types with different pH, or particle size). A table height work area contained by wood or plastic makes teaching demonstrations easier. A secure water source nearby is important. A lockable place to store supplies and tools is useful - buckets, hand trowels, rakes, sand, extra pots.

web links and workbook

components of the outdoor classroom
Community Build
Community Partners in Design/Development

- Neighborhood of Affordable Housing
- Nuestra Comunidad
- Allston Brighton CDC
- Dudley St. Neighborhood Initiative
- Grove Hall CDC
- Dorchester Bay CDC
- Madison Park NDC
- Hyde Sq. Task Force
- 4 Corners Coalition
- Mattapan CDC
- Fields Corner CDC
- Jamaica Plain NDC
- Codman Sq. Health Center
Recreation & Health
Partnering with BPS in Academics

- **English Language Arts** – Schoolyard Writers’ Workshop
- **Science** – Co-Sponsor Teacher Workshops w/ BPS
- **Mathematics** – Math Concepts in the Schoolyard
Professional Development
Welcome to the Hennigan School's Educational Garden. You may eat a few of the fruits and vegetables, but please leave most of them for the children who planted them.

Please do not hurt the plants. They are the projects of over 100 children, some of whom may be your brothers, sisters or cousins.
Community Partners in Education

- Arnold Arboretum
- Learning By Design
- Children’s Museum
- Boston Nature Center
- Earthworks
- Eagle Eye Institute
- City Year
- Mass. Water Resources Authority
- Boston Recycling Office
- Urban Ecology Institute
- The Food Project
- Earth Stewards
- Citizen Schools
- Annenberg Math & Science Project
- Antioch New England
- Impact II School to Career
- Rhode Island School of Design
- Mass. College of Art
- National Wildlife Federation
- Medicine Wheel, Inc.
- Zumix
- Harvard Ceramics Studio
- Dunn Foundation
- Boston College
- Boston University School of Public Health
Community Partners in Sustainability

- Youth Build
- City Year
- 4H/UMass Cooperative Extension
- WRHS Agribusiness
- Mayor’s Summer Jobs
- Allston Brighton CDC
- BNAN Master Gardeners
Hugh Roe O'Donnell Schoolyard
Open 8am - 9pm

This schoolyard is a smoke-free, alcohol-free, drug-free area.

Please...
- Show respect to others
- Be careful... Be polite... Take turns
- Walk... Don't run
- Use play equipment properly
- No dogs
- Use feet first on slides
- Keep this area clean,
  Throw gum and litter in trash cans

Written by and for the children of the O'Donnell School.
BSI: The Current Phase

- 3 Grant Cycles (Spring 2007, 2008, 2009)
- 9 Full Campus Projects (w/Outdoor Classroom)
- 9 Outdoor Classroom-Only Projects
- 2:1 Public/Private Capital Funding Ratio
  ($1.2 million/$600,000 per year)
- Repair/Maintenance funding (BSFC/BPS/City)
- Community Organizing Support (BSFC)
- Educational Programming & Support (BSFC/BPS)
- Planning next steps