

Education Specifications

Learning is Connecting with Nature

Make the outdoors abundant

Nature is a critical part of the learning environment that exists both beyond the building and within it. The site presents the opportunity to be in nature, and more importantly, the opportunity to establish an immediate awareness of and connection to the natural world.

Being outside is not only important, it is a necessary condition for learning. According to John Medina, author of [Brain Rules](#), being active while outdoors provides the optimal condition for a child's cognitive development. When speaking before school designers, Medina makes two important points. First, exercise is critical, particularly with children. The human brain is most active during exercise; additionally, lack of exercise impairs cognitive function. Ideally, students should be active at least once every hour. Second, being outside matters. The human brain performs best when it is outdoors. Put simply, recess and PE are not enough. You must build opportunities for students to be active and outside for the maximum amount of time possible.

How will we ensure that our students are engaged with the natural world around them?



Children need to connect to nature

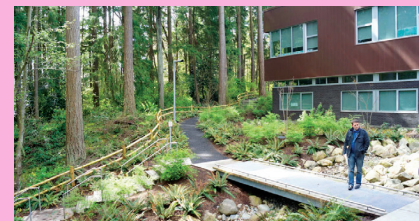
Engage the site's natural assets

Consider hydrology: strategies include restoration, daylighting, the use of the natural geographical landscapes, and direct education. Finn Hill, a junior high school in the Lake Washington School District, uses a series of rain gardens to treat rainwater and create six distinct courtyard habitats: montane, upland forest, riparian, wetland, island sound, and coastal.



Connect with nature from within

Students spend a significant amount of time indoors. At Cherry Crest, an elementary school in the Bellevue School District, a landscaped courtyard and garden terrace allows students to visually and physically connect with nature throughout the day.



Provide immediate access to the outdoors

At A.G. Bell, an elementary school in the Lake Washington School District, each learning cluster has immediate access to the outdoors. From the shared project area on the ground floor and a generous stair from the upper, children are allowed to quickly move outside and immediately transition from focused mode to active mode.



Consider non- and semi-conditioned spaces

Islandwood, an outdoor education center on Bainbridge Island, has non-conditioned breezeways which accommodate circulation and create solar lobbies: spaces that are immediately adjacent to each classroom allow contact with heat, wind, pressure and light. Beyond offering an increased awareness of time, place and the natural world, non- and semi-conditioned spaces help reduce energy use.



Additional Thoughts

Rethinking the learning space

The classroom is shifting from a single space to a variety of smaller ones with flexibility to be reconfigured into larger spaces. Consider making some of the small group spaces non- or semi-conditioned. While unavailable on certain days, these spaces will be particularly sought after on temperate ones.

Use natural materials

Through touch, smell, and patina, natural materials such as wood and stone engage the senses and provide an alternative means of understanding the natural world. When natural materials are contrasted with more manufactured ones like steel and glass, students learn about material properties, including transparency and opacity, thermal conductance, and responsible manufacturing.

-Adapted from: John Medina. Brain Rules. 2008. <http://brainrules.net>