## A Resource...

CT.org... amphitheaters are great sources for education, especially outdoor amphitheaters. They are generally inexpensive, informal and easily located in small spaces. Lectures, participatory readings and demonstrations work well on a stage with a close relationship to the audience.

## **Planning School Grounds for Outdoor Learning**

## National Clearinghouse for Educational Facilities

at the National Institute of Building Sciences ©2010 1090 Vermont Avenue, NW, Suite 700, Washington, DC 20005-4950 888-552-0624 www.ncef.org Prepared under a grant from the U.S. Department of Education, Office of Safe and Drug-Free Schools

## Cheryl Wagner and Douglas Gordon, Hon. AIA October 2010

Almost every K–12 school has at least some outdoor space that faculty could use (or already do) to breathe life into concepts learned in the classroom. Even within tight urban settings, many schools have had success using rooftops to install safe and secure play and garden areas. Research shows that students better absorb and retain math, science, language arts, and other skills that incorporate their immediate environment and use all five senses (Lieberman and Hoody 1998). A more recent study has linked outdoor play to stronger social skills and increased creative development (Miller, Tichota, and White 2009).

These positive educational impacts are especially strong when outdoor activities are an integral part of the structured curriculum (Learning through Landscapes 2008). Once we accept that education naturally occurs both indoors and out, the term "outdoor learning" will begin to seem as strange as the never used "indoor learning." Thoughtful and imaginative teamwork by designers, teachers, students, facilities personnel, and parents can develop a new or existing school site's full potential in ways that create:

- A more flexible learning environment with greater educational options overall
- A safer school less prone to student vandalism and accidents
- A closer cultural connection to the surrounding community
- Environmental and energy savings from wisely adapting the building to the site
- Cost savings during facility construction and in ongoing maintenance.

This publication covers the planning and design of school grounds for outdoor learning in new and existing K-12 facilities. Curriculum development as well as athletic field planning and maintenance are not covered although some references on these topics are provided.

Read full study at: www.ncef.org/pubs/outdoor.pdf