

# HIGH PERFORMANCE SCHOOL Q & A

## WHAT IS A HIGH PERFORMANCE SCHOOL?

High performance schools vary in size, shape and structure, but they all have certain similar attributes: they use healthier and more resource-efficient building materials; they conserve energy and water, and perhaps most importantly, they are inspirational places to learn and to teach.

## DO HIGH PERFORMANCE SCHOOLS HAVE TO COST MORE MONEY?

No. Cost-effective high performance schools can be built on any budget, and if there is any additional cost, these can be recouped in energy savings. In fact, the benefits of high performance schools, including lower energy bills, increased productivity and lower absenteeism can help a school pay for itself many times over. For example, the Dalles Middle School in Oregon saved a lot of money up-front. By using groundwater heating and cooling, natural ventilation, efficient lighting and other strategies, the designers were able to downsize the electrical and HVAC systems, reducing capital costs by about \$200,000.

### Learn More:

The Dalles Middle School – Case Study

Please go to [betterbricks.com/schools](http://betterbricks.com/schools), in the success story section, to find The Dalles Middle School case study.

## HOW DO HIGH PERFORMANCE SCHOOLS AFFECT THE PRODUCTIVITY OF STUDENTS AND STAFF?

Because high performance schools provide better thermal, acoustic and visual comfort, both students and staff feel better. A 2005 study by Gregory Kats showed that better lighting in green schools can increase test scores, reduce behavioral problems and increase overall student achievement. It also demonstrated improvements in the reduction of asthma and other illnesses which means fewer school days lost to illness. In this study 70 percent of executives involved with green schools reported that the green school reduced absenteeism and improved performance.

Staff benefit from these healthier environments, too. The same study showed that green buildings reduce sick days. Of the executives surveyed, 74 percent report that teacher attraction and retention is better in their green facilities.

### Learn More:

Greening America's Schools, Costs and Benefits, Gregory Kats 2006

<http://www.cap-e.com/ewebeditpro/items/o59F9819.pdf>

## WHAT KIND OF ENERGY SAVINGS CAN BE EXPECTED FROM A HIGH PERFORMANCE SCHOOL?

The exact amount of money saved on energy varies from school to school depending upon design and the systems that each building uses. It is clear, however, that techniques like daylighting (using the sun as a primary light source, with electric lights as a backup), occupancy sensors (which can automatically turn off heating, cooling and lighting systems when no one is using a room) and natural or high efficiency ventilation can have a dramatic effect on the amount of energy used. This means less money spent on energy bills and more for books and classroom equipment. One example is the energy-efficient middle school in The Dalles, Oregon, which is saving the school district about \$50,000 a year in energy costs when compared to the building it replaced.

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## WHAT ARE THE FIRST STEPS IN BUILDING A HIGH PERFORMANCE SCHOOL?

First, start planning for high performance features early in the process. Set your goals in the beginning phases of planning and include the Education Specifications. Discuss them with your building team—architects, engineers, staff, parents and administrators—from the start.

### Learn More:

Link to [betterbricks.com/schools](https://betterbricks.com/schools), and click on the “Getting to High Performance Schools” section.