



INFLUENCE THROUGH Sustainability



How a Hudson elementary school inspired its community and earned a LEED Gold Certification

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When River Crest Elementary school opened to over 500 students two years ago in Hudson, its influence had already grown beyond the student body and their families.

At the beginning, school district leaders decided to incorporate sustainability into the design and construction of this elementary school.

From the launch of the project, the Hudson School District had a vision to create a 21st century, hands-on learning environment for the students, district and community. Fundamental to that focus was positively influencing the education

and health of the student while building a highly sustainable school that combined a smart, coherent flow with a remarkable look and feel. The result is a school that earned a prestigious LEED (Leadership in Energy and Environmental Design) Gold Certification.

The design of the school naturally lends itself for greater cooperation between students and teachers, and

also provides more natural light and fresh air, which has proven to improve learning.

John Mueller, a fifth-grade teacher at River Crest said the school has also provided a catalyst to focus on green principles.

“I feel that this building and site really have the expectation that we focus on sustainability, and they’re becoming part of the curriculum. It’s something we can’t really ignore anymore, even if we wanted to,” Mueller said.

The environmental curriculum is indeed expanding at River Crest Elementary. Since its opening, students

and teachers have been able to take advantage of a paved trail that encircles the River Crest campus and connects with the trails at the neighboring YMCA's Camp St. Croix. Multiple opportunities for hands on learning in science, math and language arts come alive when students have the freedom to explore in a natural setting. For instance, the school has identified a portion of its campus as a certified school forest. Students and teachers will be working in the forest to clear out invasive plant species and restore the area to its natural environment with native plants.

provide energy savings for many years to come.

The location of the school delivered yet another opportunity for a strategic connection. River Crest Elementary School is located near the YMCA's Camp St. Croix. An underpass was constructed beneath a highway, permitting safe access between the school grounds and the camp property and its existing trail system.

These and other partnerships provided not only enhanced sustainable solutions, but greater enthusiasm for the school district's project throughout the community.

“The overall project cost, combined with River Crest's LEED Gold certification validates and confirms that sustainable design and construction can be done at or below conventional costs.”

— Mark Hanson, director of of sustainable services, Hoffman, LLC

Collaboration Produces Many Messengers

Numerous partnerships and tales of collaboration gave this project many opportunities to spread the story throughout the region. It began with school board members banding together and starting the process, believing in building sustainably, and ensuring the district was pushing itself for LEED Gold Certification throughout the design and construction.

The next significant partnership occurred between Hudson School District and the planning, design and construction firm, Hoffman, LLC. It was these two groups that mutually fostered the vision and produced many highly sustainable solutions at an excellent cost.

Another noteworthy partner, Andersen® Corporation, worked with Hoffman to design a new window product for River Crest Elementary School that was used throughout the school. The unique product maximizes natural light while reducing glare and will

The Community Watches Closely

The surrounding community kept a close eye on the project from start to finish. As the building, with obvious attention to style and design, grew out of the ground, the word spread that it was highly sustainable. It became clear to those involved in the project that the critics were circling. Many wrongly assumed that a great appearance and a green strategy meant that the costs were growing. But that was far from reality.

River Crest was designed and built for \$166/square foot, which included design, site work, construction, equipment, fixtures, and furnishings. That is 29 percent below, or \$57/square foot less than, the average cost for public elementary schools built in Wisconsin, Illinois and Minnesota in 2008 as reported by School Planning & Management in their “2009 Construction Report.”

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Sustainable Principles in Action

River Crest Elementary School is Hudson School District's sixth elementary school, but the first school in the district to be designed and constructed using sustainable principles. There are numerous decisions that go into any project; here are some that continue to inspire others.

Samplings of sustainable highlights at River Crest Elementary School include:

WATER EFFICIENCY Water-reducing bathroom fixtures, including dual-flush valves and waterless urinals, provide water savings in excess of 40 percent over a conventionally designed building. Outside the building, storm water is retained on site and landscaping employs native species, eliminating irrigation and minimizing maintenance.

DAYLIGHT HARVESTING AND VIEWS Additional daylight is delivered to the classrooms via high ceilings, strategic placement of gray Low-E windows, and photosensors to control the direct/indirect lighting. This improves student performance and attendance and adds to teacher morale.

RECYCLING OF CONSTRUCTION WASTE 94 percent of construction waste materials (measured by weight) were reused or recycled, thus avoiding contributing to our ever-growing landfills.

LOCAL MATERIALS More than half (by cost) of the materials were manufactured within 500 miles of River Crest, reducing fuel consumption and pollution associated with transporting them while simultaneously supporting the regional economy. □

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tainable design and construction can be done at or below conventional costs,” said Mark Hanson, Hoffman’s director of sustainable services.

It was meaningful to demonstrate to the taxpayers and the entire community that they were getting a great value. It provided verifiable evidence to those considering construction that you truly can build a highly sustainable, attractive building for less than conventional construction. The Hudson School District enjoyed lower initial construction costs and is benefiting from greatly reduced ongoing operational costs. That gets a lot of people’s attention.

Now, the community looks upon the school district’s work with pride. The Hudson School District recently received the Green Leaf Award from Sustain Hudson — a non-profit citizen group that promotes economic, social and environmental health in the community. The award recognizes the vision and leadership of the district’s R3 (Reduce, Reuse, Recycle) Committee, which includes staff, students and administrators from the school district and parents and community members. The R3 Committee focuses on sustainable practices in the school district (the committee recently started a garden club at one of the district’s elementary schools).

River Crest Elementary School and the Hudson School District are providing the Hudson community with a model for sustainable practices from large businesses, like the district, to the everyday awareness of students and their families in the choices they make in recycling, reusing and reducing.

Recognition Creates a Ripple Effect

River Crest Elementary became the first elementary school in the state, and just the second public elementary school in the nation, to receive Gold Certification under the United States Green Building Council’s (USGBC) LEED for schools rating

system. This valued designation from the USGBC validates that the school meets high standards for a variety of important factors, including: indoor air, water and energy use, recycling of building materials and more.



River Crest Elementary School has been featured in the 2008 School Planning & Management’s Education Design Showcase — named as “Judges’ Choice” — and the 2009 edition of *Learning By Design*, where it was featured as one of the Outstanding Projects — demonstrating best practices in sustainable design and construction — in the Green Special Section. As well, it was the recipient of a Distinguished Award in the Second Annual SchoolDesigner.com Design Collaboration and named a 2009 Associated General Contractors of Wisconsin BUILD Wisconsin award winner in the Design Build — New Construction category.

Each time River Crest Elementary School is showcased, the net of influence is thrown a little broader.

“We’ve had three different school districts, one from Wisconsin and two from Minnesota, come and visit, the Minnesota Naturalists Association hosted a portion of their fall state conference on our site, and we were invited to present on River Crest to the Minnesota USGBC as part of its green schools initiative,” said Travis Barringer, River Crest Elementary School’s principal.



Award-Winning School

River Crest Elementary School in Hudson was just the second elementary school in the country to receive Gold Certification under the United States Green Building Council’s Leadership in Energy and Environmental Design (LEED) program.



Spread the Influence

The true impact of the school board’s decision to build sustainably will never be fully documented. But, the exceedingly visible project is clearly changing behavior and helping students, teachers, partners, the community, and the region see that you can build an attractive building at a reasonable cost, enhance the health of the occupants, be good stewards of the environment, and enjoy ongoing savings for the life of the property. That is the greater influence... and it’s within reach. ■

Habisch-Ahlin has been Hudson School District’s communications specialist since 2007. She also served on the school board during River Crest Elementary School’s design and construction, and contributed to the decision to build a sustainably designed school.

Borski is a senior project architect and the education team leader for Hoffman, LLC, an Appleton-based planning, design, and construction firm. He was the architect for the River Crest Elementary School project.