

## Shepard Middle School Next Generation Science Labs

### Deerfield, IL

Renovations to Shepard Middle School turned four traditional science labs into 16 dynamic environments for teaching Next Generation Science Standards (NGSS). The primary design challenge was to modify the existing passive learning spaces to align with the three dimensions of NGSS: Practice, Crosscutting Concepts and Disciplinary Core Ideas.

Comprehensive interior renovations, combined with strategic small expansions, turned the labs into a mix of authentic environments where students are able to apply the scientific method. LearnLabs, science labs, collaboration space and outdoor labs give students the same tools found in many private sector research facilities.

A key highlight of the design is the use of "Easter eggs" to allow students to investigate and solve problems related to the seven Crosscutting Concepts of NGSS. Light refraction through color glass block supports lessons on Cause and Effect. An electron shell floor pattern helps describe System and System Models. On-site solar panels, wind turbines and rain barrels

let students explore Energy and Matter.

The new environments have opened up a world of possibilities for science instruction at Shepard Middle School. "The labs have made

me a bigger dreamer," says one teacher, "and our students are becoming bigger dreamers, too."



### Remodel/Adaptive Reuse/ Restoration

#### Science center

#### Fanning Howey

600 22nd Street, Ste. 103 - Oak Brook, IL 60523

www.fhai.com

Charli Johnsons, AIA, REFP, LEED AP - 847/292-1039

#### DESIGN TEAM

Charli Johnsons, AIA, REFP, LEED AP, Project

Executive

Greg Monberg, AIA, CEFP, LEED AP BD+C, Project

Architect/Designer

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Carla Remenschneider, RID, IIDA, Interior Designer

Jeff Schloffel, RCDD, RTPM, Educational Technology

Designer

Doug Partington, PE, Mechanical Engineer

#### OWNER/CLIENT

Deerfield Public Schools District 109

Deerfield, IL

Dr. Michael Lubelfeld

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#### KEY STATS

Grades Served: 6-7

Capacity: 100

Building Area: 7,326 sq. ft.

Space per Student: 71.26 sq. ft.

Cost per Student: \$26,764

Square Foot Cost: \$376

Construction Cost: \$2,676,494

Project Cost: \$3,324,547

Completion Date: May 2014

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