

2014 Exhibition of School Planning and Architecture

Prairie Trail Elementary School

Gurnee School District 56

Wadsworth, Illinois

Prairie Trail Elementary School

For years, the District faced issues with flooding at their existing elementary school. After a successful referendum that made funds available to construct a new building on a different site, the community wanted a facility that was more than just warm, safe, and dry. The result is a 90,199-square-foot school in which every design detail is intentionally optimized to support a differentiated curriculum that provides students with choice and the ability to control their academic destiny.



Community Environment

The primary challenge was to create a building that maximizes learning opportunities. Nothing in the design is by accident – every square foot of the building and site is focused on supporting the curriculum and delivering research based 21st century learning opportunities.

Special Challenges Met

- Securely located new school on 70-acre site comprised of more than 65% wetlands
- Wetland mitigation requirement 21 site-related permits, including work with the Army Corp of Engineers
- Design takes advantage of connections to wetlands to create five outdoor learning areas

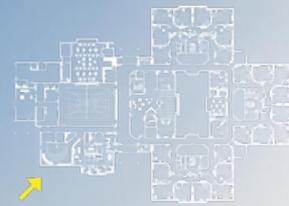
School exterior and surrounding wetlands



Extended learning area with rain garden



Bus and student drop off



Community Environment

Community Partners

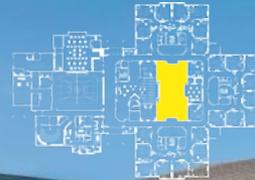
- Procuring funding required work from four communities to pass a referendum, as well as local and state representatives to obtain state and federal grants
- Local environmental grant provided an exterior classroom with rain garden, pervious pavers, and wood bridge



Context – Urban/Suburban/Rural

- Exterior blends with natural features of site, while maintaining low profile for nearby residences
- Walking path connects school to nearby residential community

Internal courtyard



Learning Environment

The school supports a differentiated curriculum based on providing students with choice in their learning environment. The District's 1:1 iPad initiative is at the center of the educational process.

Project Based Learning

- Extended learning areas act as resource for differentiation of daily learning activities and student choice
- Daylighting and wide double-door openings in extended learning areas are a direct result of the District's vision and comments gathered during the school tours which were part of the planning process
- Natural site features/wildlife, lighting patterns from skylights, etc. serve as teaching tools
- Courtyard and outdoor labs act as extensions of the Learning Resource Center, art room, music room, and academic curriculum



Learning Environment

Integration of Technology With Curriculum

- Infrastructure supports 1:1 iPad initiative, interactive whiteboards, audio enhancement systems, computer resource labs, and large venue projection screens

Learning Styles / Multiple Intelligences

- Students have choice over learning process, thanks to recorded lessons on iPads, flexible classrooms, multiple venues in extended learning areas, and outdoor learning areas connecting to surrounding wetlands and natural habitat

Typical classroom



Media center with glass operable wall



Physical Environment

The design integrates elements of the surrounding community with best practices in student-centered sustainable design, making the building a unique, yet proven, place for learning.

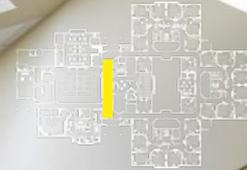
Context

- Mural in main corridor depicts District's vision statement; mural was commissioned by District and completed by local artist

Color / Pleasant Learning Environment

- 8 large skylights and large window walls bring natural light deep into building
- Indirect lighting in classrooms reduce glare

Main corridor



View from main corridor through media center



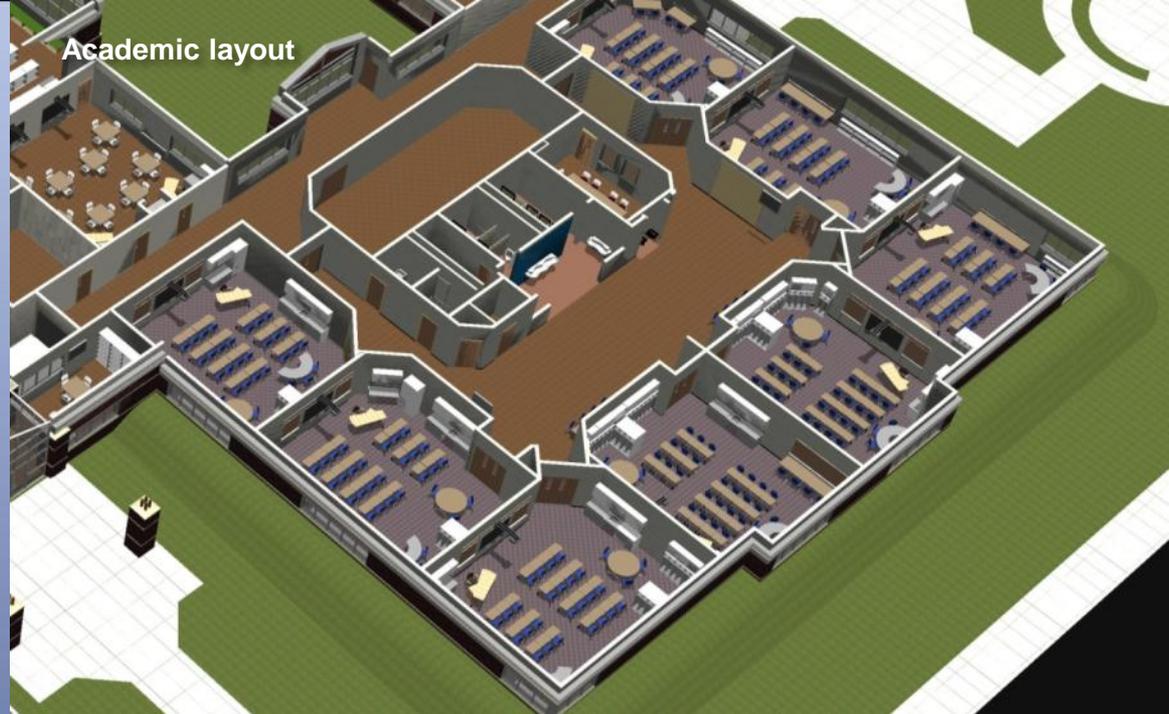
Physical Environment

Age Appropriate / Furnishings

- Flexible furniture in classrooms is mirrored by multiple seating arrangements in cafeteria, which encourage social dining

Functional Relationships

- Flexible academic pods support grade-level, academies, looping, or multi-age instruction
- Division of academic and community areas promote security during after-hours events
- Multiple types of learning spaces enhance students' core competencies and growth through a student-centered approach



Planning Process

Timeline of Planning Process

- Time constraints required the planning team to take an unconventional approach – design could not occur until the referendum passed, and the team would only have six months until bidding at that point
- In response, the planning team used the year-long referendum process to organize multiple tours of nearby elementary schools
- These tours allowed participants to engage in a planning/visioning process in real-world environments

Stakeholders Involved in the Process

- Board Members, administrators, curriculum staff, teachers, and community members toured multiple buildings, sometimes more than once
- The process allowed them to engage their peer educators in a conversation regarding best practices and to see those strategies and their impact on education in real time

Main entrance



Bus drop off and student entry



Planning Process

How the Process Affected the Learning Environment

•During tours and conversations with other educators, stakeholders with other educators, stakeholders responded favorably to the following items:

- Use of grade 3-5 configuration, vs. K-6 configuration
- Extended learning areas with extensive daylighting
- Central courtyard for exploration
- Delineation of public/private space
- Cubbies/storage in classrooms

How Planning Team Continued to Be Involved / Methods Used to Ensure Final Environment Aligns with Vision/Goals

- The strong shared vision forged during planning guided the design process, including frequent involvement of District staff in design decisions
- Teachers understand how spaces support education, because they have previously seen them in action, resulting in a building that is fully utilized as intended

Cafeteria



Floor plan



Exhibition of School Planning and Architecture

Project Data

Submitting Firm :	Fanning Howey
Project Role	Architect of Record
Project Contact	Charli Johnsos, AIA
Title	Project Executive
Address	32 Main Street, Suite C
City, State or Province, Country	Park Ridge, IL 60068
Phone	(847) 292-1039

Joint Partner Firm:	
Project Role	
Project Contact	
Title	
Address	
City, State or Province, Country	
Phone	

Other Firm:	
Project Role	
Project Contact	
Title	
Address	
City, State or Province, Country	
Phone	

Construction Firm:	Frederick Quinn Corporation
Project Role	Construction Manager
Project Contact	Jack Hayes
Title	President
Address	103 S. Church Street
City, State or Province, Country	Addison, IL 60101
Phone	(630) 628-8500

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Project Details

Project Name	Prairie Trail Elementary School
City	Wadsworth
State	Illinois
District Name	Gurnee School District 56
Supt/President	Dr. John Hutton
Occupancy Date	January 2013
Grades Housed	3-5
Capacity(Students)	600
Site Size (acres)	70
Gross Area (sq. ft.)	90,199
Per Occupant(pupil)	150.33
gross/net please indicate	
Design and Build?	
If yes, Total Cost:	
Includes:	
If no,	
Site Development:	\$3,000,000
Building Construction:	\$18,101,933
Fixed Equipment:	\$900,000
Other:	\$1,000,100
Total:	\$23,002,033

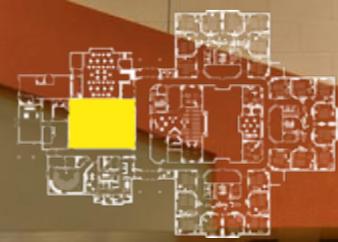
Supporting/Supplemental files/Images

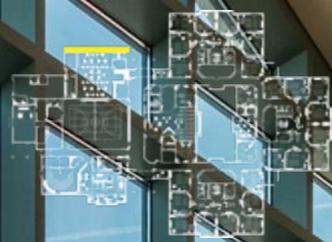


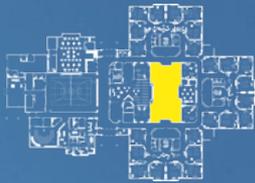
Building Section



Corresponding Exterior Elevation







The success of the school's design is ultimately reflected by the accuracy with which it translates the District's educational vision. "If I had to do it all again, I would not change a thing," says the District Superintendent.

