

SchoolConstructionNEWS

design+construction+operations

JULY/AUGUST 2011 | VOLUME 17, NUMBER 5

 **EmlenMEDIA**
Publisher of specialized business news since 1994

FLEXIBLE DESIGN

FEATURES:

Sustainable Modular Design P. 13

Architects To Watch P. 16

Facility of the Month P. 17

EDUCATION ON DISPLAY

New School Employs Museum Design Concepts

By Sameea Kamal

Photo credit: Fred J. Fuhrmeister

When planners for Summit Elementary School in Casper, Wyo. wanted a unique design for their new school, they didn't wait for it to come to them.

Instead, a district representative visited the 2008 American Association of Museums annual meeting in Denver with hopes of finding an alternative to traditional school design.

The school was built to serve a new neighborhood and community built in the rural area of Wyoming and was funded by the Wyoming legislature through the school facilities commission, officials said.

The district met with New York-based Lee H. Skolnick Architecture and Design Partnership to come up with a concept for the new facility.

The design was influenced heavily by approaches central to museum design practices, including immersive environments to convey content and ideas "through multisensory experiences, user "entry points" through activities that personally engage them with concepts and topics being presented and an interpretive "look-and-feel" palette that aids in conveying a specific narrative, according to design firm officials.

Using a "visioning" process with charettes set up by the design firms, the community was able to submit ideas for the school facility.

School officials worked with three architectural firms — New York-based Lee Skolnick, Fort Collins, Colo.-based firm RB+B and Amundsen Associates from Casper, Wyo.

"I think one of the unique and very exciting aspects from my point of view is the design of the building was created based upon the educational programming that was wanted inside that building," said Anne LaPlante, principal at the elementary school. "The program, the facility itself enhances the educational programming."

The building was built around the three themes of people, history and nature.

La Plante said some of the educational upgrades or museum type tendencies are thematic, associated with one of those three aspects.

The school has solar panels that have been up and running since the school opened last year.

"We have secured a grant through Chevron to purchase a wind turbine that will sit outside the school on a knoll on the south side and collect data from the geothermal exchange system and from solar panels," she said.

The school has also secured a grant for to develop a video game, called "The Power & Weather Station: The Great P&W Adventure," with two levels for the varying age groups to teach them about the weather and how power is generated, distributed and consumed, including solar and wind power.

"It allows our children to take data, and use it in a way that they can use their imagination, make it come to

PROJECT TEAM	
Owner/Operator:	Natrona County School District 1
Architect of Record:	RB+B Architects Inc.
Design Architect:	Lee H. Skolnick Architecture + Design Partnership
Local Architect:	Amundsen Associates
Construction Manager/General Contractor:	Adolfson & Peterson Construction

life," she said. "We're pleased with that."

The kindergarten through fifth grade public school will have 236 students in the fall — when fully occupied, it will serve 422 students.

The school has a waiting list of 62 students for next

Classrooms at Summit Elementary are designed with movable furniture for flexibility.



Courtesy of Lee H. Skolnick Architecture + Design Partnership

year as well.

The facility is home to a community partnership funded by private donations for a Child Development Center preschool.

“It has been a wonderful experience,” LaPlante said. “I would say that from my perspective as the building principal and from the educational staff perspective the key that really makes our building run well is there was a visioning process that was educational in nature — the facility was built to actually support the educational programming.”

LaPlante said the school has also hired a staff that embraces the concept of the hands on, project-based curriculum that uses the educational upgrade components.

“It has proven successful — we’ve just completed our first year of operations,” she said.

The school has increased enrollment by 100 more students for the upcoming year.

As a district where families choose which schools the students will go to, the school has ranked as a school of choice and is the fastest growing in the 23-school district.

Jo Ann Secor, principal and director of the museum services program at Lee H. Skolnick said the school representatives who came to the annual museum conference in Denver approached the firm wanting to do something more evocative of new thinking and create a school reflective of their own community.

“They were especially interested in a project we had recently finished in Ohio which is basically a center for entrepreneurial education, like a school building for entrepreneurs,” she said. “It’s highly interpretive, so we used a lot of what we call design as interpretation — what’s the story we want to tell here?”

“They liked that we took the traits of an entrepreneur — passion, journey, risk-taking — and embedded them in the design of the building.”

Though an architectural firm, Lee Skolnick also does exhibition design and interpretive planning, and has educators on its staff, she said.

“We went through a process with them of conducting these design and envisioning charrettes that involved the experts, school administrators and teachers to help them sort of come up with ideas about what would they really want this school to express,” she said. “That came on the heels of doing a tutorial about what are the great aspects of an elementary school?”

The tutorial included topics like Regio Emilia’s third teacher concept about the importance of the environment in a learning environment.

After coming up with six charettes each day for two days, the firm did the design based on that information.

Secor said the overall theme that drove the design and construction for the project was convergence based on the area the school was situated in, with a brick façade representing the colored strata of a famous local rock formation, Hell’s Half Acre, and large window



The new school features spaces to foster interaction between students, staff and parents.

walls with views of the mountaintops and frolicking antelope.

“It’s a really interesting area, with a very flat plain that comes up against the Laramie mountains and all kinds of sort of meteorological issues where they get very high winds, severe wind and winters,” she said. “It’s also a crossroads for at least four historic trails, like the Mormon Trail, the Pony Express and so forth, so it’s sort of a convergence for various cultures to come together.”

The design of the school features a village center, meaning when one enters the school they come into a large open area sunken in that allows flexibility so the school can use it for whatever they need it to be, she said.

With drop-down net curtains it can be a sports arena, or a space for concerts or lectures.

The school’s common areas were set up with central informal seating under specially designed acoustic ceilings with audio enhancements.

Having the facility available to the community as an open resource was a criterion members came up with during the design process.

“I think the community is really embracing the school and the idea of the village center and we took things schools have traditionally had like science labs and art studios and combined it into a creativity suite, so they can conduct science classes and art classes as well,” she said.

The openness is applied throughout the school, with hallways created by movable furniture so there are no defined walls, and classrooms defined by the furniture, Secor said.

As in a museum, the open interiors are designed with attention to acoustics, officials said.

The village center set up, like a museum, is also designed to foster interaction between parents, teachers and students through visibility and collaborative space.

Kelly Eastes, spokesman for the district, said that construction cost about the same as typical “production-line” schools in the same district while it resulted in more usable square footage.

Officials said the Wyoming School Facilities

PROJECT DATA

Facility Name: Summit Elementary School, Casper, Wyo.

Type: New Elementary School

Construction Budget: \$16 million

Final construction cost: \$14.6 million

Area: 61,472 square feet

Design Start Date: 2/2/09

Design Completion Date: 7/6/09

Construction Start Date: 4/22/09

Construction Completion Date: 8/25/10

Commission had initially been skeptical of the design, but now considers Summit a showcase school.

“Favoring good design over what was assumed to work in the past, we created a space far more usable than traditional alternatives,” Eastes said.

“We’ve been going back several times since it opened in August and the teachers seem to be quite thrilled,” Secor said. “We’re continuing work in adding interpretive enhancements.”

Currently in development are three interactive terminals for the wind turbines that will allow students to look out at the turbine to do wind and power studies.

Lee Skolnick designs for facilities ranging from schools to resorts and corporate offices, but has a big interpretive planning museum design and education arm.

“What we see is an interesting phenomenon is this work that we usually do in museums — we do a lot of children’s museums, which are highly structured around core curriculum — are designed to really enhance local curriculum studies,” Secor said.

Enhancing local curriculum has been a big influence on the firm’s creation of education centers.

“We’ve haven’t really been in the traditional education field but I think we’ve found like-minded folks in the people at the Natrona county school system who came to the conference,” Secor said. “We certainly have spent a lot of time designing experiences that will teach curriculum and specific areas and disciplines.” ■

PRODUCT DATA

Exterior Finish: Morin Metal Panels

Roofing: Sika Sarnafil

Carpet: Mohawk

Furniture: VS America

Flooring: BASF

Gym Flooring: Mondo

Tile: Daltile

Windows: Kawneer

Building Envelope: Interstate Brick

Paint: Diamond Vogel

Suspended Acoustical Ceilings: USG