

Elementary #26 built for hands-on learning



Humble ISD's 26th elementary campus will be a two-story, 113,895 square foot building designed to serve 950 students. Architectural rendering by PBK.

Science and math are more than subjects taught in school. They are powerful forces that shape how the universe works.

This will be apparent when Humble ISD opens its 26th elementary campus in August. The school, not yet named, is under construction in the Eagle Springs subdivision on Valley Lodge Parkway.

"One of the major principles for designing high performance schools is that the building becomes a tool of learning itself – not just a place to house kids," Martha Buckner, Assistant Superintendent for Support Services, said.

With learning as the goal, the building includes "demonstration pieces" designed for hands-on lessons. Students will see math and science concepts at work in the building all around them. Data collected through the tools will be accessible to students throughout Humble ISD via the district's computer network.

"This is exciting because Humble ISD's vision for elementary science is wrapped up in this building," Alison Pierce, Elementary Science Coordinator, said.

"We'll be building science literacy by taking concepts that can be abstract to students and making them concrete. They're going to be able to see, feel, do and experience science all around them."

Special features of the campus include:

- **Interactive kiosks**
"These are touch-screen computers connected to the building's systems," Deborah Yocham, Humble ISD Director of Facility Planning and Construction, said. "Students, parents, teachers and staff will be able to walk up to a kiosk and call up information about electricity, gas or water usage. The information will be real-time, as well as historical."

Teachers will be able to use the information for a wide variety of mathematical exercises – addition and subtraction, graphing, word problems and more. Students will be able to compare and contrast energy efficiencies. They will see how technology can boost efficiency.

"It will be real," Yocham said. "It's not a story in a book. It's not a picture in a book. When you can bring learning to the tangible level, it's most effective."

- **Rainwater collection and solar panels**

Runoff from the roof will be collected into a cistern and used for the student garden irrigation. Solar panels will convert the sun's energy into electricity that powers a computer in the library.

- **Waste management systems that emphasize recycling**

The campus includes a decomposer and pulper. The machines convert food waste and other recyclable materials into mulch. The mulch will enhance school grounds, and with less waste the district won't be paying as much for garbage collection.

Elementary #26 is being built to the criteria for LEED (Leadership in Energy and Environmental Design) certification. LEED certification is recognition that a construction project was attained utilizing environmentally-friendly building practices. The campus also is being designed for CHPS verification (Collaborative for High Performance Schools).

District officials know of no other school in Texas that has achieved both high standards. "We're calling it a double major," Buckner said. "This campus will become a prototype for other districts and bring a wealth of recognition to Humble ISD as a leader in sustainable and high-performance building practices."

The two-story, 113,895 square foot building is designed to serve 950 students in PreK through grade 5.



Interactive kiosks with real-time and historical data about the building's energy usage will be located in the school's main corridor. The kiosks can be used for math and science lessons, allowing students to experience the connection between academic concepts and the real world. The district's network will make the data accessible to students throughout Humble ISD. Architectural rendering by PBK.