San Patricio County News

VOL. 102 • NO. 42 • A Home-Owned Newspaper

- Sinton, Texas

THURSDAY, OCTOBER 28, 2010

Student city planners gaze 150 years into the future

By KURT MOGONYE

Managing Editor

A new student-led design group has formed at E. Merle Smith Middle School allowing sixth graders the opportunity to research, plan and create their very own city.

And not just any city, but one that has progressed 150 years into the future.

With the ushering in of the new T-STEM (Science, Technology, Engineering & Mathematics) Academy at the middle school, several Sinton sixth graders have been provided the opportunity to take their creativity and problem solving skills to design a municipality as part of the National Engineers Week-sponsored Future City competition

Eleven students have teamed up and meet each week after school to put their city planning caps on.

"Now that we're a STEM Academy we thought it would be awesome for these kids to participate," said team sponsor Cynthia Peña.

Students will use SimCity 4 Deluxe™ software to design a city of the future, but guidelines require that the municipality have at least 50,000 residents.

Students self-score their future city computer design to ensure they have met all the required design elements.

Once the computer model is completed the team will select an area of their city to be represented in an actual model they build entirely out of recycled materials. Their spending limit has also been set at \$100.

Not only will the students have the opportunity to use computers and a SmartBOARD to design the model city of the future, the team will also be required to write an essay about their project as well as a Future City narrative describing their city's key features.

Providing assistance and guidance will be professional engineers including David Brown, an architect from Ferrell-Brown & Associates, Inc. who has been hired by Sinton ISD to design the new Welder Elementary campus, as well as Sinton City Manager Jackie Knox.

Knox met with the team and provided some insight as to what should be considered when planning public infrastructure, how city's are financed and operated, and basic design guidelines.



Teammates (clockwise from left) Samuel Trevino, Ryanne Koether, Magan Lorberau, Abbigale Sample, Audrey Gonzales and Samantha Orta gather around a SmartBOARD to provide suggestions on where to construct a street in their simulated "Future City". The E. Merle Smith Middle School students are using SimCity 4 software to create a city 150 years into the future while considering the health and safety of its residents.

"David Brown will work the kids to build a medium-sized city in SimCity™ and make sure it sustains itself for 150 years," said Robin Mounts, T-STEM project coordinator. "Basically, the students' jobs are to think like engineers."

This year's Future City competition will focus on health care and the Sinton students have selected skin cancer as the issue they want to address for their city's residents.

The team's Future City must address health care and how their design will aid and improve the health of its residents.

Team member Abbigale Sample said she expects their unnamed city to be "environmentally friendly and one that helps skin cancer patients."

"We have to make sure we don't put a lot of toxic material around and we don't want nuclear power plants," Sample said. "We chose skin cancer as our issue because anyone can get it and because the ozone layer is bad. We researched a lot of cancers and decided on this."



Sinton City Manager Jackie Knox (far right) recently visited with students involved with E. Merle Smith Middle School's "Future City" competition to discuss city planning and factors to consider when designing a community. Listening intently to Knox's presentation are (I-r) Kendall Allen, Madelline Nieto and Magan Lorberau. The students will are using problem-based learning with computer simulation to design a community 150 years in the future.



When designing their city the students must consider everything from the layout of public facilities to buses and other forms of public transportation.

"I want to be an engineer when I grow up and this will help me," said team member Samuel Trevino. "We're learning how to build and engineer a city and we also learned how to manage our city and to take care of its citizens, streets and other infrastructure."

Trevino said the city began with \$100,000 to spend and was nothing more than grassy land in the SimCity™ software. "We will build it out and attract more people to bring in more money," he said. "You have to think about everything—water supplies, sewer and electricity. We have to consider all of the factors"

Peña said the team's focus now is to learn all functions of the SimCity™ software while working on the essay before finalizing their Future City for competition in January at Texas State University.

Organized under the National Engineers Week Foundation, the competitions are held to "truly affect the way students and the general public perceive engineering because it is important for engineers to use the right messages," its Web site states.

"Too often engineers focus their message to young students on the process of becoming an engineer and overlook messages on the value of an engineering career," says Bill Knight, Future City's national program manager. "The National Engineers Week Foundation has been engaged to develop messages to convey that engineering is a helping profession that requires teamwork and creativity."