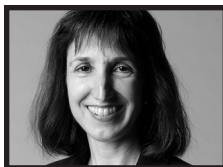


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'FUTURE CITY' CHAMPS

SCI-TECH SCENE | Model green developments snare honors for South Side science students**SANDRA GUY**

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Imagine living in a city powered by geothermal energy from hot springs, where trains run on solar energy and where all of the children own a computer.

The city, Tsumefang, is the brainchild of students at the IIT Math and Science Academy/Perspectives Charter school at 3663 S. Wabash, who competed in this year's Chicago Regional National Engineers Week Future City competition.

This year's Future City competition had a depressingly prescient assignment for the students: Design an affordable living space for people who have lost their homes because of a disaster or financial emergency.

Students in the competition worked in teams, along with a teacher and in many cases a volunteer engineer, to design the city, build a model of it, and see if its economics made sense via software SimCity 4000. The models had to include recycled materials and could cost no more than \$100 to build. Students wrote a description of their city and an essay on the competition's theme.

The people of the imaginary Tsumefang would have heard alarms in case of a disaster.

The residents also enjoyed a hot spring — the result of an inactive volcano — as both a tourist attraction and the source of geothermal energy. The students fashioned the main urban high-rise building with affordable housing, healthy indoor air quality, a rooftop garden, win-



The latest Chicago school to win honors in the Engineers Week Future City competition is the IIT Math and Science Academy, a Perspectives charter school. The students show off a model city that they built, complete with geothermal energy and detailed water-filtration systems. Students showing the Freidan project are Alexander McCann (clockwise, from bottom left) Mario Alcantar, Akporesiri Omene, Christopher Katz, Anthony Aguirre, Lester Potts, Marc Williams and Johnathan Harris. | RICHARD A. CHAPMAN ~ SUN-TIMES

dows that block out heat while providing light, and apartments outfitted with bamboo and cork floors and cabinets.

The IIT academy hosted two teams for the competition this year, its second year participating. The second team designed a city named "Freidan," fashioned after the German term for peace.

"We focused on everything being equal and safe," said Johnathan Harris, a 13-year-old eighth-grader who worked on the Freidan project.

A Disaster Protection Center provided not only physical protec-

tion and emergency provisions, but also offered help for residents in financial crises, Harris said.

The city also featured a skyway highway open only to hybrid and environmentally friendly cars, and an underground water filtration system that collected rainwater, cleaned it and sent it back to residents as drinking water. Freidan focused on energy efficiency by incorporating in the power system wind turbines, backup generators, an underground water system, and solar and lunar panels.

The students prepared for the

competition by spending several hours after school, once to twice a week, from September to January.

William Yadron, the learning behavior specialist who served as the teams' mentor, was impressed with the students' essays.

"I enjoy academic competitions, and that's why I decided to sponsor" the Future City teams, said Yadron, who teaches biology, writing and algebra.

The teams, despite having no volunteer engineer as a guide, won "best geo-technical design" for Tsumefang, and "best municipal

services" for Freidan.

They competed against 17 other teams from 13 schools in the regional event in January at the University of Illinois at Chicago. The regional winner was St. Paul of the Cross School in Park Ridge.

An analyst with the Brattle Group, an economics consulting firm based in Cambridge, Mass., said the students are correctly anticipating what experts believe will be an 80 percent or greater reduction in the use of coal and natural gas as major U.S. power sources by 2050.

Comment at suntimes.com.

IN BRIEF**AIRLINE SAFETY****FAA pushes for more American Airlines fines**

Regulators are proposing more maintenance penalties against American Airlines. The Federal Aviation Administration said Friday it would fine American \$787,500 for three cases involving maintenance problems. In the most serious case, American operated a plane without replacing a central air data computer on the jet.

ALCOHOL SALES**U.S. wine exports down almost 15 percent in 2009**

People worldwide are still buying U.S. wine in a tight economy, although exports were down in 2009 from 2008's record-setting year. U.S. wine exports dropped nearly 15 percent last year. The largest decrease — 21 percent — was in shipments to the European Union, which is the biggest importer of U.S. wines.

CHILD SAFETY**Infant slings can pose suffocation danger**

The government warned Friday that baby slings that hip moms and dads are sporting can be dangerous, even deadly for their little ones. The Consumer Product Safety Commission said it has investigated 13 deaths associated with sling-style carriers. In its warning, CPSC said that slings can pose a suffocation hazard.

COMPENSATION**Apple COO gets \$5 million bonus for stewardship**

Apple Inc. is giving its chief operating officer a \$5 million bonus for "outstanding performance" in running the company while CEO Steve Jobs was on medical leave. Timothy Cook also will receive 75,000 restricted stock units scheduled to vest in 2011 and 2012, Apple said in a regulatory filing Friday.