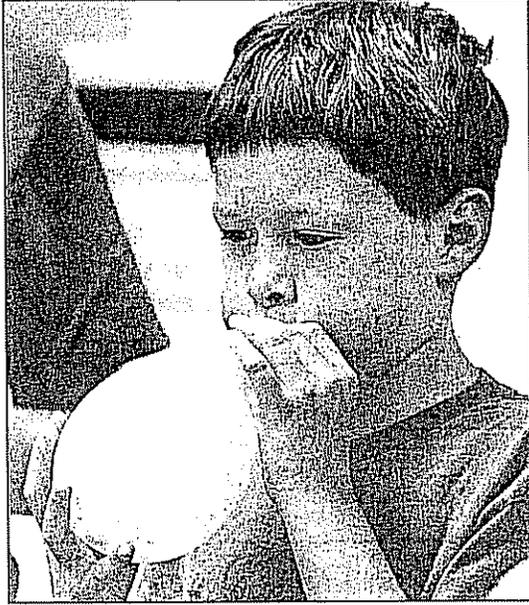


STEM program inspires kids



Brian Jenkins blows up a balloon to use as a propellant during Science, Technology, Engineering and Math, or STEM, camp.



Photos by Jim Davis / Arizona Daily Star

Freddie Chacon watches his balloon-propelled vehicle race down a string held by Meredith Close, outreach coordinator at the Arizona Science Center, during STEM camp at Flowing Wells Junior High.

> ULTRA HANDS-ON ACTIVITIES GET PARTICIPANTS LEARNING AND ENGAGED <

By Andrea Rivera
ARIZONA DAILY STAR

Ethan Burch has always loved science, but his appreciation for the subject is even greater since he attended the Flowing Wells Summer Science Camp.

"I love science, but now I want to marry science," Ethan said. "I thought science was about the universe and gravity, but it's also about marine biology and archaeology. There's maybe 800 fields of science."

Ethan, 11, was one of about 15 students — mostly from the Flowing Wells Unified School District — who attended the four-day camp at Flowing Wells

Junior High School, 4545 N. La Cholla Blvd.

Ethan will start the sixth grade at Homer Davis Elementary School in August.

Three sessions of the four-day camp were held starting June 1 as part of a pilot program between the Flowing Wells 21st Century Skills for Success Program, the Arizona Department of Education and the Arizona Science Center to increase students' exposure to science, technology, engineering and math, which are

CAMP

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collectively referred to as STEM.

Camp concluded last Thursday with a trip via Hummer limousine to the Arizona Science Center in Phoenix.

Only three school districts in the state hosted summer STEM camps through the partnership.

STEM instruction emphasized discovery, not through memorization of facts, camp instructor Alisa Reynolds said.

Meredith Close, an outreach coordinator at the Arizona Science Center, and Michelle Cook also were part of the teaching staff.

Some of the students couldn't recall liking science as much before attending the camp.

"Before I went to camp, I thought science was trees and nature, but now I learned you can explode stuff and do experiments. It opened my mind," Madeline "Mady" Hahn said.

Mady, 10, will be a sixth-grader at Walter Douglas Elementary School in August.

Here's a look at some of the things the students discovered:

► Squids are interesting marine animals.

Students dissected squids as part of the camp curriculum.

"It was nasty," said 11-year-old Zenia Estrada, who will be a sixth-grader at Laguna Elementary School. "I learned that they have two hearts and they have a beak."

Squid have two hearts connecting to their gills and one heart for the rest of the body.

► Mixing cornstarch and water creates a sticky concoction known as oobleck.

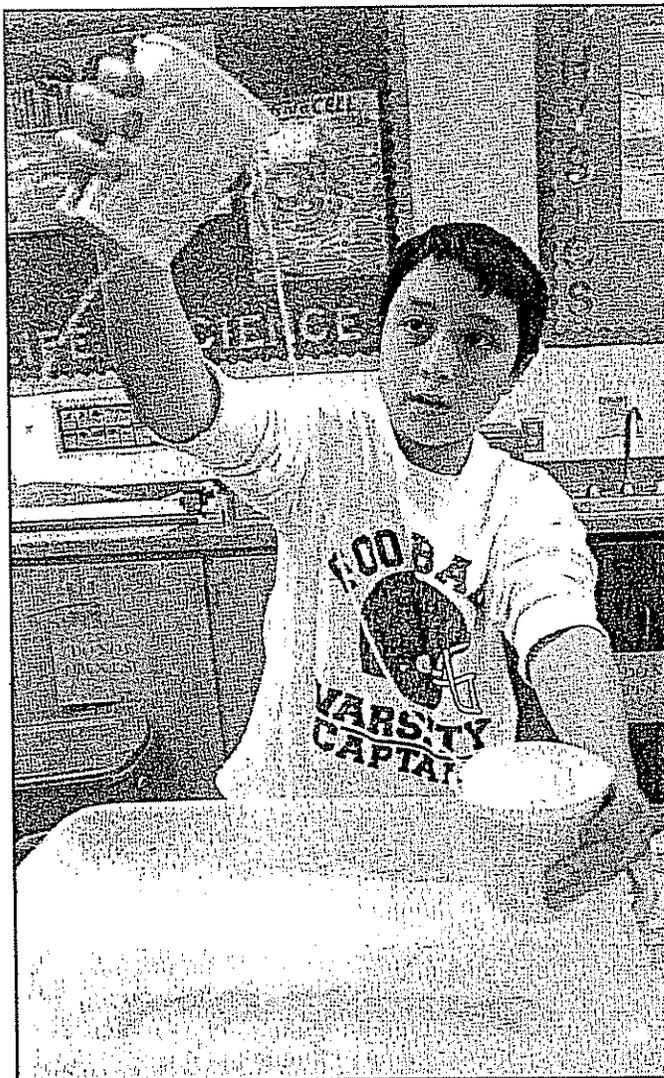
The term "oobleck" comes from the Dr. Seuss book "Bartholomew and the Oobleck."

"It's a solid and liquid," Joey Pazos said about oobleck.

Joey, 11, will be a sixth-grader at Hendricks Elementary School.

"If you put two surfaces on the oobleck it would turn into a solid and if you have fast motions, too," he said. In other words, if you move it quickly between your hands, it retains its solid shape.

However, added Sonoran Science Academy student Ricky Starbird: "If you just leave your hand still, it turns into a liquid."



Freddie Chacon pours water from one cup to another down a string during a camp designed to expose kids to science, technology, engineering and math.

► You can lift a table with just air.

During a lab exercise on air and water, students lifted a table and each other using just air.

Students lifted a classroom table — which was face down on a table of equal size — using a Ziploc bag.

A straw was inserted into the bag and students positioned themselves around the table and blew up their bags with their lung power, which lifted the table.

► S'mores don't have to be cooked over a campfire.

Students constructed hot and cold houses using cardboard and other materials.

The hot houses were used as ovens to cook s'mores.

"The cement is really hot

right now so the black velvet is going to soak up all the heat and cook the s'mores inside," Ethan said about how the construction of his hot house would cook the dessert.

► A certain brand of mints can send plastic soda bottles into the air.

"We discovered if you put four Mentos in a two-liter soda it explodes," 10-year-old Brian Jenkins said.

Brian, who will be a fifth-grader at Laguna come August, said he likes to learn when an activity is put in front of him.

"Science is my favorite subject because you learn by doing projects and experiments."

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