



MIKE STOTTS/VIEW

Jerry O'Brien, a teacher at the Southern Nevada Vocational Technical Center, checks the finished specifications of a King Elementary School student's truss bridge at the Model Bridge Building Contest, held at UNLV on March 3.

Students' bridges put to the test at UNLV

By FRED COUZENS

VIEW STAFF WRITER

Tom Miller put the screws or, more specifically the Tinius-Nelson Universal Testing Machine screws, to 10 lightweight bridges built by 17 Gifted and Talented Education students from King Elementary School March 3, as part of the 18th annual Student Model Bridge Building Contest held at UNLV.

And, as expected, they all failed the load plate pressure

test — some more readily than others.

Of the 10 basswood bridges that all passed the 30-gram (1.06-ounce) weight test, the wood-and-glue structure built by Amy Pellouchoud and Katlyn Jackson survived the longest at a pressure of 37.5 pounds.

"Right now, that's in 11th place overall," said Miller, a member of the American Society of Civil Engineers, one of two principal sponsors of the Clark County School District-

wide competition. "That's a really good job."

The next-closest bridge, built by Zachary Shattler and Marc Wolpert, came in at 21 pounds followed by seven bridges in the 10-to-19-pound range. One bridge came in at six pounds.

"I think it was a lot of hard work for a good reason," said 11-year-old Katlyn, who wants to be either a zookeeper or veterinarian when she enters the



MIKE STOTTS/VIEW

King Elementary School fifth-grader Jacob Piper, left, watches as his bridge is stress tested by Richard Senecal, right, at the Model Bridge Building Contest at UNLV. This year, 32 elementary schools, 11 middle schools and 10 high schools from throughout the Clark County School District participated.

► BRIDGE: Competition started in 1990

CONTINUED FROM PAGE 3AA

work world. "Lots of triangles helped, too."

Katlyn's bridge-building partner, Amy Pellouchoud, wasn't there to see their creation take the top spot among the school's entries as they underwent testing in a cool, dark lab tucked away in the Thomas Beam Engineering Complex.

According to GATE instructor Anne Marie Eby, Katlyn and Amy were determined to make the competition even though the bridge they started out making didn't quite meet the specifications.

"Katlyn and Amy built two bridges because the first one was too high," Eby said. "They built and completed their second bridge before some of the students had finished their first bridge. I was really impressed by their creativity and ability."

Bryan Jones, who teamed up with Sam Woodbury to come in at 10.25 pounds, described their design process.

"From the pictures we saw, we thought a rounded top and the arch would help it stay together more," he said. "We both glued, too."

Niguel Nusser, who partnered with Emily Cooper for an 11.5-pound entry, talked about their "secret material."

"Triangles are stronger and using the green glue, that's

the secret," she said.

The GATE students began building their creations in mid-January and had them complete, for the most part, days ahead of the Saturday event, but Eby said one was still being worked on until the day before.

Last year, Aaron Richner, Tyler Goodale and Brent Hickey entered King's strongest bridge, which held until

"I think the contest actually involves anywhere from 1,500 to 2,000 students. We typically sell about 700 kits to schools, so if you figure if there are two students per bridge, that's at least 1,400 right there."

PAUL MATUSKA
COORDINATOR,
MODEL BRIDGE BUILDING CONTEST

it reached the 40.5-pound mark.

The bridge building contest put on by ASCE and the Bureau of Reclamation started in 1990 and has grown to where this year 32 elementary schools, 11 middle schools — Garrett Junior High School was in the competition also — and 10 high schools com-

peted.

"We'll probably have close to 300 bridges that will be tested that will be the work of anywhere from 500 to 600 students, especially since they tend to team up in the elementary division," said Paul Matuska, a Bureau of Reclamation employee who was this year's event coordinator. "I think the contest actually involves anywhere from 1,500 to 2,000 students. We typically sell about 700 kits to schools, so if you figure if there are two students per bridge, that's at least 1,400 right there."

Matuska estimated that, on average, about 60 percent of the high schools, 30 percent of the middle schools and anywhere from 22 to 25 percent of the elementary schools participate in the competition annually.

When it was over, a couple of the students had some interesting plans for their cracked, but intact, bridges after the pressure test.

Katlyn said, of her and Amy's winning entry, that "me and my partner decided that we were going to cut it in half and keep it forever."

Jackson Dunagan, who teamed up with Evan Klouse, had a more drastic fate for this year's effort.

"It was fun to see how much it could hold," he said afterward, "Now, I'm going to take it home and stand on it."

► SEE BRIDGE PAGE 7AA