

# Girls demonstrate engineering prowess in egg-drop experiment

BY PAUL TENNANT / EAGLE-TRIBUNE / MARCH 3, 2015

LAWRENCE — Only 14 percent of engineers in the United States are women, according to the National Science Foundation.

That percentage may be destined for a dramatic increase. Dozens of girls who participated in an egg-drop experiment at the Boys & Girls Club of Lawrence showed that they have the ability to think like engineers.

Several middle-schoolers said in interviews that they are contemplating careers in engineering or science. The egg drop was organized by the Boys & Girls Club, Raytheon and the nonprofit group Science from Scientists to encourage girls to consider those endeavors.

The object of the experiment was to place an egg inside a cup, drop it from a step ladder – and not have it break. The idea was to replicate, in very rudimentary form, the landing of rovers on Mars.

Fourteen teams, each consisting of four or five girls, participated in the challenge. Only two eggs broke.

The girls were given a variety of materials to use in cushioning the fall of the eggs: Rice Crispies, balloons, pipe cleaners to name a few.

They also had to stay within a mock budget of \$50 million. The cup containing the egg cost \$10 million, according to Lindsey Miller, assistant director of education for the Boys & Girls Club.

Herian Perez, 9, a fourth-grader at Tenney Grammar School in Methuen, suggested to her teammates, Maricruz Ortiz, 9, a fourth-grader at Guilmette School in Lawrence and Maribella Otiz, 12, a seventh-grader at Guilmette, that

they inflate balloons and attach them to the cup to slow it down during its descent.



MARY SCHWALM/Staff photo

*The Ballers from left; Kristy Davis, 11, Karena Simmons, 11, Melissa Fuentes, Lea DeLeon, 11, Genesis Paula, 12, Yasmerlin Ortega, 12, and Aysha Checo, 13, pose for a photo with their egg drop contraption after participating in a science program for girls at the Boys and Girls Club in Lawrence.*

Herian said she would like to become a mechanical engineer some day. Maribella said she likes science, especially chemistry, because she's fascinated by the elements.

"Inventing things," she said when asked what she hopes to do as an adult.

Herian, Maricruz and Maribella were guided in their efforts by Jayleen Reyes, a junior at Central Catholic High School. Jayleen aspires to become a neurosurgeon and said she was looking forward to visiting the neurosurgery section at Lawrence General Hospital.

Rosa Gomez, 13, a student at Frost School in Lawrence, and her teammates enjoyed the thrill of

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By Paul Tennant ptennant@eagletribune.com

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*Screenshot of the actual news article at [http://www.eagletribune.com/news/girls-demonstrate-engineering-prowess-in-egg-drop-experiment/article\\_d0792ca3-f5ec-5cac-8143-f9bb2db17276.html](http://www.eagletribune.com/news/girls-demonstrate-engineering-prowess-in-egg-drop-experiment/article_d0792ca3-f5ec-5cac-8143-f9bb2db17276.html)*

*“Girls demonstrate engineering prowess in egg-drop experiments” Continued...*

seeing their “rover” fall to the floor without the egg breaking. Rosa, who hopes to become a marine biologist, explained that they cushioned the egg with Rice Krispies.

Joining her were Aaliyah Rodriguez, 12, Wetherbee School in Lawrence; Aaliyah Martinez, 12, Lawrence Family Development Charter School; Urielys Cirineo, 11, Timony Grammar School in Methuen; and Angelis Aguilar, 10, Frost School.



MARY SCHWALM/Staff photo

*Girls react as their contraption is dropped from a ladder during an egg drop experiment in a science program for girls at the Boys and Girls Club in Lawrence.*

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*Read the full article at:*  
[http://www.eagletribune.com/news/girls-demonstrate-engineering-prowess-in-egg-drop-experiment/article\\_d0792ca3-f5ec-5cac-8143-f9bb2db17276.html](http://www.eagletribune.com/news/girls-demonstrate-engineering-prowess-in-egg-drop-experiment/article_d0792ca3-f5ec-5cac-8143-f9bb2db17276.html)



MARY SCHWALM/Staff photo

*Members of Team Food from left; Urielys Cirineo, 11, Aaliyah Rodriguez, 12, Angelis Aguilar, 10, Rosa Gomez, 13, and Aaliya Martinez, 12, wait as a scientist checks the integrity of their egg after an egg drop experiment in a science program for girls at the Boys and Girls Club in Lawrence.*



MARY SCHWALM/Staff photo

*Willneyshka Rodriguez, 12, talks with teammates Gaby Fiato, 12, right, as they work with their team G-Power including Natalia Fiato, 10, left, to design an enclosure to protect an egg in an egg drop experiment during a science program for girls at the Boys and Girls Club in Lawrence.*