



Northwest Iowa  
Community College

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## **NEWS RELEASE**

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when received.*

### **Northwest Iowa Community College Hosts Third Annual High School Engineering Expo**

Northwest Iowa Community College hosted the third annual High School Engineering Expo Tuesday, May 12. The object of the NCC Engineering Expo was to promote engineering as an exciting field for young people and to assist high schools in providing STEM education outside of the classroom. The competition consisted of four phases: egg launch catapult/accuracy, egg launch catapult/distance, poster presentation, and a problem solving competition. Sixty students from northwest Iowa high schools participated in this daylong event.

Each of the teams conceptualized the design and built their catapults prior to the competition. The day of the Expo they set up their catapult in a designated launch area and launched raw eggs at a bull's-eye target. Each team had three practice shots and five scored shots.

The students also needed to create a poster that included the calculations of predicted distances of the catapulted egg, documentation of the design process, and a list of materials used. The poster needed to be visually attractive and demonstrate the group's understanding of the engineering principles involved.

For the second year, a Problem Solving Competition was added to the day. For this competition the teams were given the following supplies: 100 straws, 2 rubber bands, 2 sheets of paper, 2 styrofoam cups, and 30" of tape. The problem they were to figure out was: in twenty minutes, using only the supplies given, build the tallest structure possible that could hold a tennis ball at the top of the structure for five seconds without moving.

New to the Expo this year was a distance competition. After the teams were done with the accuracy portion of the competition they lined up their catapults to see how far their catapults would throw the egg.

Each school could win first, second or third for each problem. The Traveling Trophy/overall winner is the combination of all the scores from each problem. Sioux Center High student and team captain, Jordan Nomansen, said, "This competition was a part of our Engineering Design class. It took us about eight weeks to build, but I think it was worth it. It has been a lot of fun! Our success is even better than what I expected."

Hartley-Melvin-Sanborn's Team Advisor, Dan De Groot, said, "I really like the competition. It is a fun and different activity for the kids to do. I use this as part of the physics class at HMS. It is a great way for the kids to practice a lot of the applications we learn about in class."

Finally, HMS student and team captain, David Hibbing, said, "We really like science. The competition taught us practical skills you need when your environment changes. It makes you think on your feet."

**Winners:**

**Overall Traveling Trophy Champion 2015**

Sioux Center High School - Warriors

**Accuracy/Presentation**

1. Sioux Center - Warriors
2. South O'Brien
3. Rock Valley - Dream Crushers (Tie)
3. Sheldon (Tie) Orabs Strategic Defensive Projectile Launcher Thang - OSDPLT

**Distance**

1. Sioux Center - Warriors
2. Hartley Melvin Sanborn - HMS Hurlin Hawks
3. Trinity Christian - Egg Launch Eggscellence

**Problem Solving**

1. South O'Brien
2. Central Lyon
3. Rock Valley - Lobbit

**2015 Participants:**

**Rock Valley High School - The Lobbit**

Advisor: Joy Hurst

Chase Van Driel, Courtney Vonk, Madison Godfredsen, Hope De Ruyter, Jonathon De Kam, Zachary Boender

**Rock Valley High School - Dream Crushers**

Advisor: Joy Hurst

Bryce Heemstra, Brady Teunissen, Bryce Van Beek, Mandy Van Kekerix, Marcus Van Kekerix, Haley Niemeyer

**Orange City Career Academy - Powerpuff Girls**

Advisor: Chris Stotz

Haley Jorgensen, David Doty, Stan Portz, Brody Pottubaum, Tyler Lamm, Noah Larsen

**Central Lyon High School**

Advisor: Bill Allen

Jericho Poppinga, Kalen Eckenrod, Grant Metzger, Chastity Henrichs, Colby McIntire, Josh Van Schepen, Jacob Tilstra, Kurtis Popkes, Michael Postma

**South O'Brien High School**

Advisor: Kim Poeckes

Karle Negus, Derian Aarick, Gunnar Klinker, Eric Koehlmoos, Wyatt Sickelka, Brody Schiefen, Daniel Wester, Duncan Schwebach, Dylan Riedemann

**Sioux Center High School - Warriors**

Advisor: John Doornenbal

Jordan Nomansen, Graham Zommermand, Jayden Vermeer, Caleb Bronner, Tyler Oliver

**Hartley Melvin Sanborn High School - HMS Hurlin Hawks**

Advisor: Dan De Groot

David Hibbing, Macin Harvey, Emma Coburn, Alan Beving, Jaylin Rieck, Blake Simons

**Trinity Christian High School - Egg Launch Eggcellence**

Advisor: John Huizenga

Dolan Boonstra, Casey Vink, Phil Boonstra, Logan Cleveringa, Grace Huizenga, Rachel Korver

**Sheldon High School - Orabs Strategic Defensive Projectile Launcher Thang - OSDPLT**

Advisor: Christopher Stotz

Colten Jett, Juan Granados, Alec DeKok, Christian Govea, Rick Klein, Cole Stofferan, Connor Vasselaar