



IOWA SCHOOL
FOR THE DEAF

EST. 1855 | COUNCIL BLUFFS

Scott Versch

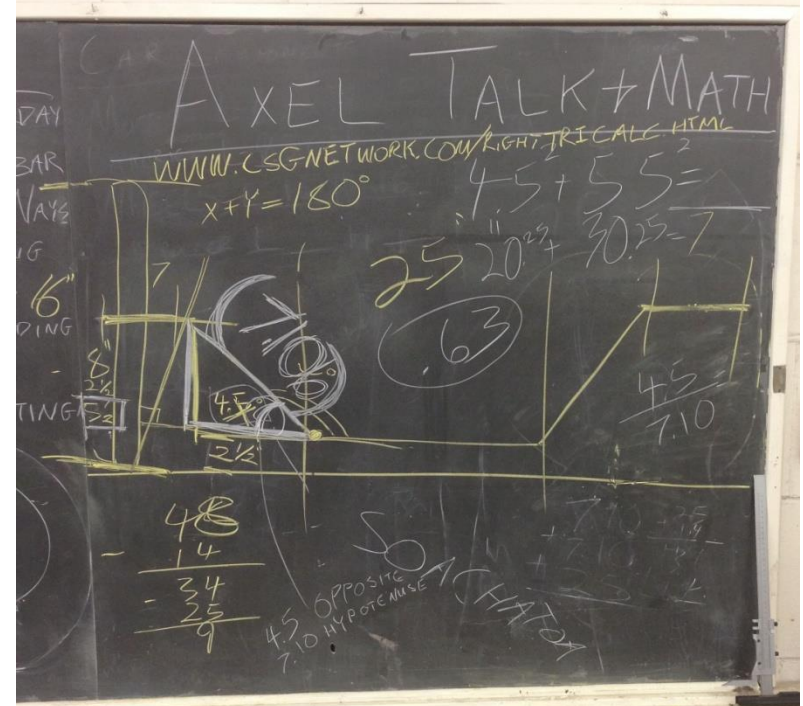
ISD Electric Car and Metals Instructor

What is the OPPD Power Drive Program?

- Utilizes ALL Subjects across the Curriculum.
 - Math, Science, Reading, Writing, Industrial Technology and Employability Skills.
- Unique Engineering Opportunity
 - Students research how to design and construct an Electric Car.
- Teamwork and Leadership Opportunities
 - In the lab and at the races.

Utilizes ALL Subjects

- Reading and Writing
 - Rules and Documentation
- Math
 - Determining overall wheel height
- Science
 - Metallurgical Characteristics
- Industrial Technology
 - Welding and Machining
- Employability Skills
 - Working individually or as a group
- Problem Solving Skills
 - Finding solutions when things don't quite work.



Unique Engineering Opportunities

- Plan and Research Design Concepts
 - Comply with Prescribed Rules
 - Research other schools
- Create a Prototype
 - Learn from mistakes
 - Simplify design
- Create the Real Car
 - Troubleshoot problems



Student Problem Solving in Action!!!

- How Kory and Curtis Fixed the Steering Problem
 - <https://drive.google.com/?usp=gmail&authuser=0#my-drive>
 - (Use Google Viewer to watch)

Teamwork and Leadership Roles

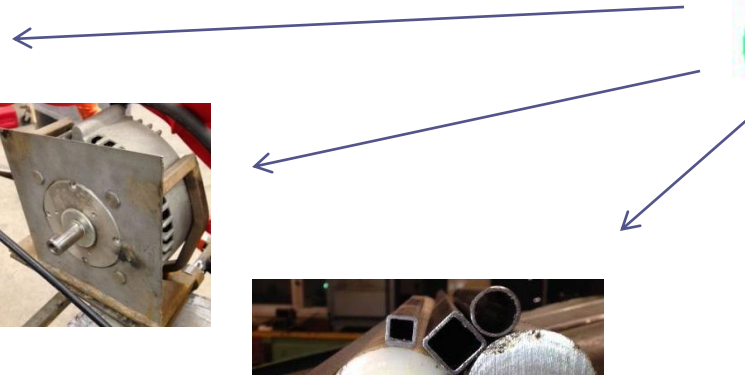
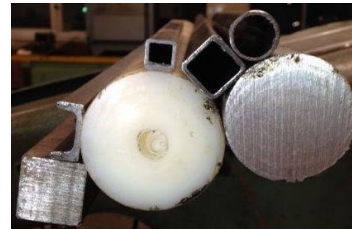
- Small Group Activities
 - Divide and conquer smaller tasks
- Large Group Activities
 - Important for size and safety
- Race Day Teamwork
 - Prepping for the race
 - During the race



What Drives an Electric Car ...?

Students will tell you many different things...

- Batteries
- Motors
- Lighter materials
- Tires
- All of these things help... However...




What Drives an Electric Car???

According to an ad that was recently published in the Lincoln Journal Star...

It “Runs on Brain Cells.”

I think this is true but I also believe that it runs on...

Student Motivation!!!



Runs on brain cells.

Student-built electric cars compete in Power Drive!
Young inventors. Amazing electric cars. Exciting competition. Watch area high school students compete in contests of design, construction, maneuverability, endurance and braking for a chance to take home the crown at this year's championships, to be held at Werner Park in Papillion!

You're invited to these Power Drive events:

Lincoln, Nebraska Big Red Invitational Saturday, April 5, 11:30 a.m. UNL - East Campus	Grand Island, Nebraska Drive-Safe Challenge Saturday, April 19, 7:30 a.m. Law Enforcement Training Center	Power Drive Championships Papillion, Nebraska Saturday, May 3, 10 a.m. Werner Park
Hastings, Nebraska Hastings Power Drive Saturday, April 12, 10 a.m. Motorsports Park	West Point, Nebraska Cuming County Open Saturday, April 26, 10 a.m. Cuming County Fairgrounds	

Go to oppd.com/ev for more information about electric vehicles.

OPPD **Power Drive** **Nebraska Public Power District**

Participating Schools
Adair • Acadia • Bancroft/Rosier • Baxter • Bellevue East • Bellevue West • Cedar Rapids Community
Cedar Rapids Public • Central City • Chase County • Clearwater Orchard • Columbus Lakeview • Crafton • DC West
Dixie • Douglas/Hartland • Excelsior • Elkhorn • Elkhorn Valley • Fremont • Harvard • Hastings • High Plains
Hornet/Dodge • Johnson/Buck • Johnson County Central • Kearney • Lexington • Lincoln • Louisville
Lyons/Dodge • Millard West • NCE Tech (Kearney) • North Platte • North Platte • Omaha Central • Omaha Eastern
Omaha Home for Boys • Omaha North • Papillion • Papillion Area Home for Boys • Raymond Central
Seward • Stanton • Stapleton • Superior • Wahoo • Waverly (Nebraska) High School • Wayne Community
West Point/Sumner • Woodside

*Indicates exhibition vehicles.

Current Update

- Results from Lincoln
 - We Won!!! Best Pit Crew Award (Teamwork/Sportsmanship)
 - Beat 10 different teams from all classes at the Big Red Invitational at UNL's Tractor Testing Laboratory
- Future Modifications
 - Sprocket Options
 - Lighter Materials
 - More Practice Time
- Future Races
 - 4/19/2014- Grand Island
 - 4/26/2014- West Point
 - 5/3/2014- (State Championship) Werner Park Omaha Nebraska



Students Driving

- Driving
 - 0315
- Stopping
0001



UPDATE:

Recently there was an article in the “*Daily Nonpareil*”

--*Iowa School for the Deaf Students Build a Car to Build their Futures*

Questions, Comments, Concerns?

- Feel free to contact me with any Questions

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