



Engineering Ambassadors Network Newsletter

Spring 2017

Executive Update

Engineering Ambassadors hit the ground running in 2015, thanks to Sally Wei, the faculty advisor. She started the program to both enhance the UNL college of engineering and the surrounding grade, middle, and high schools. We visit schools to educate the future generations about engineering, and the amazing opportunities that come with it. We use interactive presentations and hands-on activities to explain new concepts and get the kids excited about STEM fields. We currently have 22 ambassadors both in Omaha

and Lincoln. In fall of 2016 alone, we reached 2590 students through student visits and on campus events. Every spring we recruit new members and every fall we update old presentations and create new ones. We are always striving to reach more students. Engineering is an important career possibility for them to know about. Engineers help solve problems in our world, and there is a never-ending surplus of problems that needs to be solved. We are excited to see what this semester brings!



Katie Schwarz
*Vice President, Omaha
Electrical Engineering*



All About: Discover Engineering Days

Discover Engineering Days (DED) are hosted by the University of Nebraska College of Engineering so middle school students and their teachers can come to the Lincoln campus to learn about engineering and the many engineering disciplines in the college. There are six Discover Engineering Days every year, once a month from September to November in the fall, and from February to April in the spring.



The Roller Coaster Activity at DED

The Engineering Ambassadors have given their interactive presentations to over 700 students through Discover Engineering Days in the past year. In just the Fall 2016 semester, over 100 middle school students attended on each day, with the record being 146 on November 10! Students from schools all over the state come to Discover Engineering Days- from Lincoln schools, to Omaha schools, and even from classrooms hours away. Even homeschooled students enjoy coming to hear the Ambassadors!

One of the most popular topics the students enjoy hearing about is the engineering behind roller coasters- with the opportunity to build their own roller coaster for a marble! Teachers say wonderful things about Discovery Engineering Days:

"I've always liked that you have the student ambassadors lead most of the day. The students have the best connection with them."

-Omaha Westside Middle School

"[I'm] excited to utilize more resources provided by the Engineering Ambassadors in my classroom in the future!"

-York Middle School

"I like the university environment! It encourages students to consider college - the student facilitators did a wonderful job of running their sessions!"

-Millard North Middle School

Students love DED even more, and the Roller Coaster Presentation and Activity is usually the favorite part of the day! The ambassadors love this event and hope to meet many more middle school students interested in engineering on a Discover Engineering Day soon!

If you're interested to learn more, or sign up for Discover Engineering Day in the Fall 2017 semester, check our website:

<http://engineering.unl.edu/discover-engineering-days/>

Interview with a Former Ambassador: Collin Erickson

What did you study at UNL and what are you doing now?

At UNL, I studied Biological Systems Engineering with an emphasis in Biomedical Engineering. I am currently working as a research associate in the department of Pediatric Cardiology at Children's Hospital and Medical Center in Omaha. I am doing analysis on mechanical properties of myocardium (heart muscle) using echocardiography.



How has being an Ambassador helped or benefited you?

Being an Ambassador helped me in many ways. I learned effective ways to present and communicate ideas to different groups of people, and I also learned the importance of being actively involved with outreach projects in the surrounding community. Engineering Ambassadors helped me see how much I enjoy teaching and working with people who come from very different backgrounds than me.

What was your favorite event you did as an Ambassador and why was it special?

One of my very favorite events as an Ambassador was when I went to Millard North High School in the spring of 2015. Having graduated from there in 2012, it was fun to interact with curious students, many of whom were considering the engineering and medical fields for career options. They asked many great questions, and it seemed like everyone in the auditorium was actively paying attention and participating in the discussion. This experience also made me appreciate not only how much I had learned in high school, but how engineering had challenged and helped me become the person I am today.



Collin leads the interactive Pacemaker Activity



Learning about floating and sinking

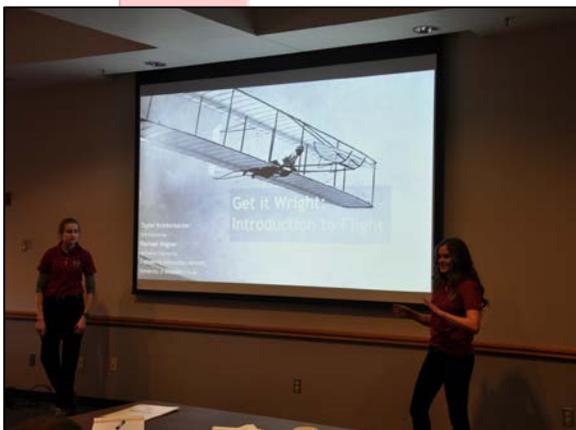
Fundraising Update

Engineering Ambassadors is always excited to encounter new fundraising opportunities. We had the opportunity to help with the Engineering Golf Scramble in September. Networking and raising awareness for Engineering ambassadors was a lot of fun, and we saw some great swings! We also held a hockey night with the Lincoln Stars. We invited our friends to attend a game with us, and sold the tickets as a way to earn money. This semester we are organizing a Noodles and Company Night in Omaha. We would also love to speak to companies about our work and the possibility of corporate sponsorship.



Ambassadors at a fundraising event for the Lincoln Children's Museum

Sarah Wangler
Treasurer and Fundraising Chair
Mechanical Engineering



The Flight Presentation



Students enjoying the Roller Coaster Presentation Activity

Ask the Ambassadors: What is your favorite presentation and why?

Prosthetics, because it illustrates a simple and applicable facet of biomedical engineering that not only shows other applications of engineering in medicine, but also gets kids interested in medical science.

-Conner Beyersdorf
Biological Systems Engineering

My favorite presentation is Roller Coasters. I like how engaging the activity is and how creative the kids get with their ideas.

-Danielle Passaglia
Architectural Engineering

My favorite presentation is Propellers because the students get very excited about understanding how to fly. I think it is a complex idea, but even very young kids understand it and enjoy it.

-Nicole Ashoff
Architectural Engineering



My favorite presentation is Flight. I like this one the best because it's a topic that spans virtually all age groups. It's a fun presentation that explains the concepts well and has a lot of fun facts for the kids.

-Brynne Schwabauer
Chemical Engineering

My favorite presentation is Aquaponics because it combines two of my passions: engineering and agriculture. It's the only presentation that talks about agriculture and is a very engaging presentation.

-Jena Wilson
Biological Systems Engineering

Learn more or schedule a visit at: go.unl.edu/unl-ean