

# Developing Youth Talent Initiative Grant Project Summaries

## 2015-16

### **Hollman Media, Kearney**

Mentorship program that exposed students to real-world development of IT solutions, led students through hands-on programming and creation of software-controlled products, and provided students an opportunity to watch Hollman Media create and deploy a technology solution for a selected student-submitted problem (shadowed Hollman as project was built).

### **Flowserve Corporation, Hastings**

Collaboration formed Manufacturing Pathways Advisory Team. Facilitated guided hands-on explorative learning activities in Design and Engineering; Construction; Manufacturing and Transportation in order to expose students to career opportunities in these fields as well as drive success of Hasting Public School's Skilled and Technical Sciences programs (for 9th-12th graders - lead them into deciding to attend and hopefully being successful in program).

## 2016-17

### **Distefano Technology and Manufacturing Co., Omaha**

Collaboration of Dream It Do It industry coalition. Created Metro Area Mobile Manufacturing Expo that included a mobile manufacturing lab, event guide, resource materials, trained industry volunteers and a volunteer database. Introduce students to 3D design and printing, automation, welding, robotics and related careers.

### **MetalQuest Unlimited, Hebron**

Created Manufacturing Career Pathway Program to increase quality and quantity of students entering South Central Nebraska Unified School District's Center for Advanced Professional Studies Program (NCAPS). Created manufacturing exploratory courses as well as integrated manufacturing projects and exposure to industry professionals for students in other classes.

## 2017-18

### **Aulick Industries, Scottsbluff**

Created multiple courses and after school programs for Bluffs Middle School that feature intensive hands-on, project-based learning through industry tours, guest speakers and industry-led that will raise general awareness around careers as well as immersion into IT and manufacturing.

### **Becton Dickinson, Broken Bow**

Mentorship program and mobile STEM Trailer for students to engage in projects using technologies that are in use by manufacturing and technology companies alongside business professionals.

### **Cyclonaire, York**

Offered new course that facilitated creative hands-on design and manufacturing project creation and increased awareness of how these activities tie to real-world opportunities.

## 2018-19

### **Nucor Detailing Center, Norfolk**

Access to age-appropriate manufacturing equipment with hands-on activities that replicates the design-to-fabrication work flow and on-going availability of equipment within the schools. Inspiring and hands-on Nucor-led classroom event

that introduces the pathway and opportunities within manufacturing and drafting. Technology and equipment provided within Norfolk Junior High School makerspace as well as a small mobile trailer that can be transported to rural partner schools

**Reinke Manufacturing Center, Deshler**

Course creation and daily mentorship to expose students through skill development and application to fabrication and mechatronics technology, equipment and career opportunities.

**2019-21**

**Orthman Manufacturing, Lexington**

Build out 3 trailers with manufacturing and technology equipment that will travel to 11 participating school districts in 10 counties for a 2-week stay. 7<sup>th</sup> & 8<sup>th</sup> grade students will work with local professionals on projects to foster mentor relationships. Students will record a brief video presentation of the skills/projects completed and compete for "Orthman Excellence Awards" that will be presented at a capstone event. The capstone event will also include a tour of CCC's Kearney mechatronics program and learn about post-secondary opportunities at CCC in manufacturing sciences and STEM.

**Vistabeam Inventive Wireless of NE, Gering**

Create new IT/STEM lab environment at Gering Junior High exposing around 450 students each year to IT/STEM hands-on learning and career exploration. Additional programming to bring in guest speakers, provide student field trips/tours and offer week-long teacher externships at Vistabeam.

**Reinke Manufacturing Center, Deshler**

Form business and education Advisory Board, create curriculum for career exploration and equip one STEM mobile lab trailer that will travel between 10 schools in 3 counties. Advisory Board will involve more than 25 businesses through curriculum development and workplace experiences such as tours, job shadowing, career days, presentations, etc.

**2020-22**

**CLAAS Omaha Inc., Omaha**

CLAAS, Metro Community College (MCC) and other Omaha manufacturers will help create a formal pathway to a career in manufacturing for students in a North Omaha after-school program managed by Partnership 4 Kids at five Omaha middle schools. Programming includes virtual and in-person tours of CLAAS and MCC, industry and career videos, activity boxes produced by CLAAS and supported by CLAAS career coaches, industry education networking dinner, CLAAS Q&A sessions, and CLAAS Industry Family Night. Two summer workshops including similar programming are also planned.

**Kawasaki Motors Manufacturing Corp., USA, Lincoln**

Kawasaki will purchase equipment and help modify curriculum for the Skilled and Technical Science courses at 12 Lincoln middle schools. Kawasaki will develop four short training-style videos to be integrated into the curriculum and will conduct virtual field trips for the students. Teachers will be invited to into Kawasaki for two full days each summer to observe engineering design and manufacturing processes to prepare them for the curriculum design and modifications.

**Nucor Detailing Center, Norfolk**

Nucor will create new curriculum on additive manufacturing, also known as 3D printing, and purchase 3D printers that will be used in five Norfolk area middle schools and on a temporary basis for any interested school district in the surrounding ESU's. Teachers from the five middle schools will collaborate with Nucor on the curriculum so the same material is used throughout each school.