

2014-2015

Science of Agriculture Challenge

Report Author: Samantha Grant

Team Members: Sharon Davis, Dorothy Freeman, Tracy Ignaszewski, Renee Kostick, Christian Lilienthal, Joshua Rice, Bradley Rugg, LaJoy Spears, Ann Marie Ward, Marica Woeste

The Science of Agriculture Challenge completed its pilot year of implementation in 2014-2015. Twelve teams distributed throughout the state took part in the final showcase event which was a 2.5 day event on the St. Paul University of Minnesota campus.

PROJECT DESCRIPTION

The new 4-H Science of Agriculture Challenge asked youth to explore and develop science-based solutions to agriculture-related issues. Youth teams partnered with local expert coaches and mentors to develop science-based responses to issues they identified in their communities. Youth explored a variety of topic issues in the areas of agronomy, animal husbandry, soil science, agriculture business, food science, engineering and more. Youth were encouraged to be creative in exploring and developing solutions to real life agricultural problems. Teams worked together starting in autumn 2014 and made formal presentations on the St. Paul campus in June, 2015.

Through hands-on 4-H agriculture, science, technology, engineering and math learning experience in the Science of Agriculture Challenge, 4-H youth were expected to get excited about STEM, gain 21st Century skills, build community connections, and be exposed to future agriculture careers.

KEY EVALUATION FINDINGS



**TEAMWORK WAS THE MOST IMPORTANT SKILL
LEARNED DURING THE SCIENCE OF AGRICULTURE
CHALLENGE.**

Evaluation data was collected from youth with a survey at the end the Challenge event. Youth shared that the most important skill they learned during the Science of Agriculture Challenge was teamwork.

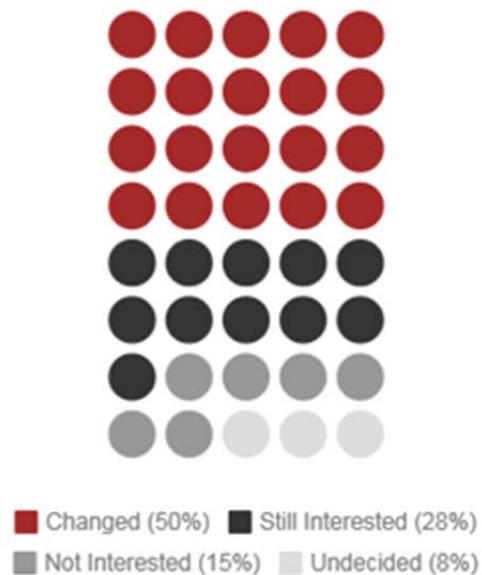
Youth reported learning more about agricultural issues in their community. Overall 92% of youth met community agriculture industry leaders and 98% connected with new mentors from agricultural industries.

Youth reported excitement and interest in science. Many of the youth involved in this program already had a strong attachment to agriculture and science. For these 28%, the Challenge still kept them interested in agricultural sciences. Half of all youth said that this program made them more interested in pursuing an agriculture or science career.

Survey results support youth interest in studying agricultural science in college and having a job related to agriculture science. 89% of youth expressed interest in having a job related to agriculture science, and 79% wanted to study agriculture science in college.

Youth also wanted to continue to learn more about the projects they studied during the 2014-2015 year.

Figure 1: Science of Agriculture youth are interested in science careers




90% OF YOUTH PLAN TO CONTINUE WITH THEIR PROJECTS IN THE FUTURE.

A key feature of the 4-H program is the connection youth gain with caring adults. All youth reported that their Science of Ag coach cared about them and was interested in their success.



ALL YOUTH AGREED THAT THEIR SCIENCE OF AG COACH CARED ABOUT THEM AND WAS INTERESTED IN THEIR SUCCESS.

The pilot evaluation allowed for analysis of the first year experience in this project. Results demonstrate that youth learned important skills in teamwork and built upon science knowledge. Overall participants in the project showed a disposition towards future schooling and careers in science/agricultural sciences.