NORTH DAKOTA STATE UNIVERSITY

EXTENDING KNOWLEDGE >> CHANGING LIVES

# Establishing a Computer Science Pathway in North Dakota

**Public Value Statement:** Computer science educational programming increases interest in computer science among younger 4-H'ers and STEM leadership skills in older 4-H'ers.

#### The Situation

Technology will play an increasingly important role in the way we live and work. The U.S. Bureau of Labor Statistics projects that in just three years there will be 1.4 million computer science-related jobs, and only 400,000 qualified job candidates.

# **Extension Response**

In response, 4-H and Google have come together for a first-of-its-kind computer science (CS) collaboration that teaches kids both technical skills like coding, and essential skills students will need in the future like, teamwork and resilience. The program isn't just about programming computers, it's about helping students learn skills they'll need to approach problems in a fundamentally different way across every discipline from business to engineering to the arts.

#### **Impacts**

Over 200 youth from across the state, ages 10-15 were reached through afterschool programs, classroom sessions, and day camps. In addition, five youth leaders helped facilitate educational programming across the state.

70% of surveyed youth participants reported that the STEM day camps increased their interest in computer science. 100% of youth leaders involved in STEM educational programming reported that grant activities improved their leadership skills and confidence with STEM programming.

### **Feedback**

"We are proud to be a part of this effort to bring hands-on programming to our nation's youth," said Jacqueline Fuller, President of Google.org. "It's important for kids to develop a wide range of skills, like computer science skills, analytical thinking and creative problem solving, and our work with National 4-H Council will help ensure that kids across the country have access to a better future."



# **Primary Contact**

Lindsey Leker 4-H Youth Development Specialist 219 FLC- North Dakota State University 701-231-7039 lindsey.leker@ndsu.edu

## **Collaborators**

Makayla Heinz Emily Goff