



# St. Vrain Valley Schools: *Students Leading the Future of STEM*

## Challenge

Many students lack access to real-world STEM opportunities, especially in rural or underserved communities. Traditional classroom instruction often cannot provide the hands-on experiences or cutting-edge technology exposure needed to prepare students for future careers in aerospace, cybersecurity, and AI.

## Solution

The St. Vrain Valley Schools Innovation Center reimagined K-12 education with two bold programs. The High School Drone Performance Team choreographs and flies 300-drone light shows at major events, giving students the chance to run what feels like a real aerospace startup. The Mobile STEM Lab brings coding, virtual reality, and AI-driven cybersecurity workshops directly to schools and community events across Colorado.

## Results

- 🌀 Drone performances seen by more than 200,000 spectators across 20+ shows
- 👤 32 students employed and paid for their work, with several launching careers as commercial pilots
- 👤 14,000 people engaged annually through the Mobile STEM Lab

## Role of T-Mobile

T-Mobile 5G is the backbone for both the drone shows and the mobile classroom. Each drone syncs through a SIM-enabled flight controller with sub-30 millisecond latency, ensuring precision and safety. The Mobile STEM Lab relies on T-Mobile's 5G gateway to power laptops, VR headsets, and AI workshops in parking lots and rural communities where traditional bandwidth is limited.

## Impact

St. Vrain Valley Schools is proving that bold ideas belong in high school. By pairing student creativity with T-Mobile's connectivity, the Innovation Center is not only inspiring the next generation of STEM leaders but also creating scalable models for hands-on education nationwide.

