



The TEACH Trailer

Montana's classroom on wheels

A Mobile Model for Agricultural Education, Research, and Outreach

Agricultural & Technology Education

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>4,200

MILES TRAVELED

~5,000

PARTICIPANTS

27

EVENTS, AY 25–26

6+

TECH STATIONS

\$50K

LAUNCH BUDGET

\$12.4K

2025–26 REQUEST

THE STORY

Precision agriculture, unmanned aerial systems, and artificial intelligence are transforming how Montana's farms and ranches operate, creating workforce needs that traditional classrooms can't keep pace with. Yet high equipment costs, geographic distance, and limited rural broadband keep advanced technology education out of reach for many schools, Extension clients, and agricultural communities. Land-grant universities have a responsibility to close that gap with innovative, experiential learning models.

The TEACH Trailer answers that call: a 26-foot mobile laboratory whose passenger side folds down into an elevated presentation deck. Visitors move through hands-on stations such as a CNC router, robotic arm, electronics fabrication, 3D printers, a drone system or engage in various presentations from the fold down deck. Faculty from multiple departments use it for teaching, research, and recruitment, with every operator trained in setup, equipment, and safe towing.

What began as a single-department recruitment tool now functions as college-wide, statewide infrastructure. The trailer has visited school-based ag-ed programs, Agricultural Research Centers, Extension offices, and commodity meetings in every region of Montana, strengthening cross-department collaboration, raising the visibility of MAES field research, and giving undergraduate and graduate students real experience delivering research to diverse audiences.

Looking ahead, the team is expanding interdisciplinary collaboration and deepening engagement with Research Centers, SBAE programs, and Extension offices statewide. Planned additions include more fabrication equipment, expanded precision-ag demonstrations, stronger field connectivity, and greater student leadership — building the trailer into competitive, shareable infrastructure for future grant proposals and industry partnerships.

IN OPERATION



Kids get hands-on with drones and fabrication tools at field day from Brett Griesbaum.



Extension agent Dr. Sam Wyffels teaches virtual fencing to ranchers sitting in the middle of the pasture.

“Every stop turns a parking lot, pasture, or fairground into a hands-on technology classroom.”

STRATEGIC IMPACT

PEOPLE-DRIVEN

Creates a shared network for teaching, research, and service across every COA and MAES department. By functioning as college-wide infrastructure rather than a single department's tool, the trailer empowers faculty and students alike, fostering the individual and organizational excellence at the heart of COA's mission.

IMPACTFUL RESEARCH

Extends field research statewide and grows graduate student engagement, especially at the Ph.D. level. Faculty use the platform to increase research visibility through live field demonstrations, while students gain hands-on experience communicating research to diverse audiences — advancing innovation with local and global impact.

TRANSFORMATIONAL TEACHING

Puts manufacturing, drones and robotics, and precision agriculture, directly into K–12 and university classrooms. Rooted in experiential learning, the trailer delivers research-based instruction and hands-on experience regardless of location, developing competent, lifelong learners who are ready to excel in agriculture and technology careers.

GROWING PARTNERSHIPS

Being present at events all over the state builds lasting ties with commodity groups, industry sponsors, and natural resource agencies. Each stop strengthens the land-grant mission by expanding access to emerging technologies and creating a larger, more connected network for collaboration and innovation across Montana's agricultural communities.

ON THE ROAD



Catapalooza, MSU campus



Rancher field day, cattle pasture



Northern Ag Research Center



U.S. Secretary of Education visit



Winter school outreach