



# Learning By Doing: Increasing Self-Efficacy of Women Teaching Welding



Kacie Eshleman, Faith Droszcz, Calla Donnelly,  
Dr. Emily Sewell, Dr. Dustin Perry, David Cohenour

## INTRODUCTION & NEED

- Women in SBAE continue to overcome gender bias and stereotypes (Baxter et al., 2001; Kelsey, 2007; Mumma et al., 2024).
- Experiences that build self-efficacy in agricultural mechanics are critical (Granberry et al., 2022).
- This research is specifically relevant in the knowledge and teaching of agricultural mechanics (Granberry et al., 2022).



## How It Works

- Partnership gave pre-service SBAE teachers hands-on experience assisting in a women's welding and safety course (Spring 2025).
- Training and panel discussions prepared them in safety, teaching strategies, and career development.



GALLATIN COLLEGE



MONTANA STATE UNIVERSITY

## RESULTS & IMPLICATIONS

- Pre-service SBAE teachers gained confidence, skills, and teaching strategies.
- Concerns included welding ability, respect, and safety management.
- Valued peer introductions and discussions on challenges women face in mechanics.
- Continue the partnership and launch a Fall 2025 program to recruit high school students into ag mechanics.



## COST/RESOURCES

- Grant from Gallatin College covered expenses.
- Pre-service SBAE teaching assistants received a \$200 stipend and faculty mentorship.



MONTANA STATE UNIVERSITY  
Mountains & Minds