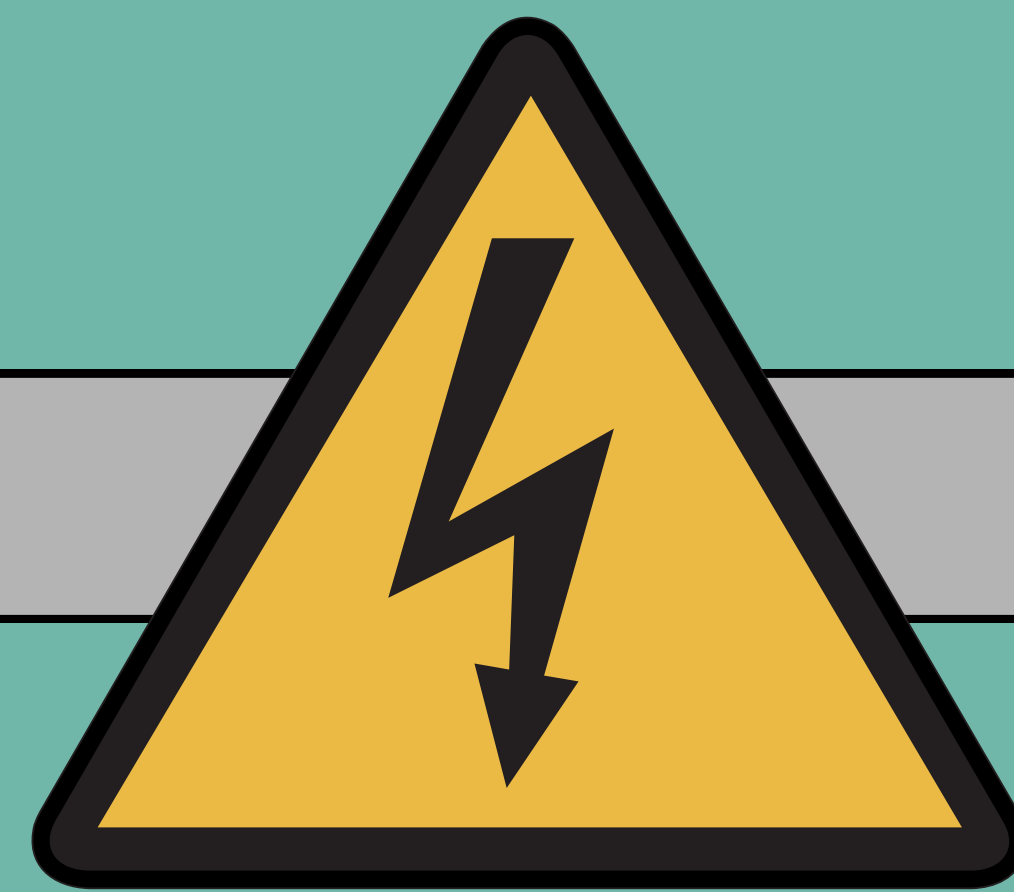




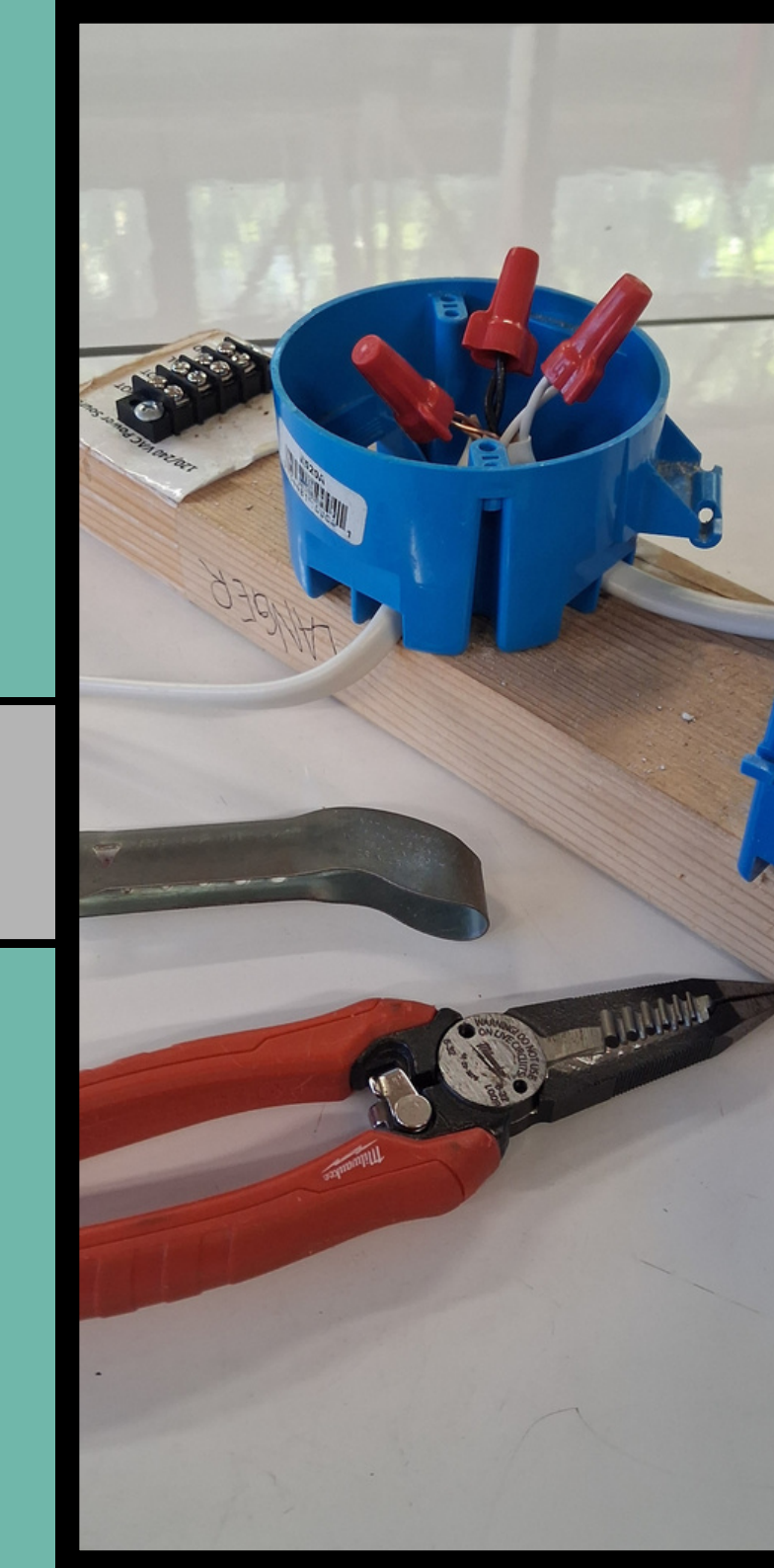
INTRODUCTION

- Increase in demand for electrical skills in Ag
- More SBAE electrical opportunities needed to meet the growing demand
- Insufficient electrical experience for SBAE teachers
- Pre-service SBAE educators receive generalized ag mech training
- The growing deficit in electrical experience may impact SBAE educators' perceived benefit of teaching electricity.



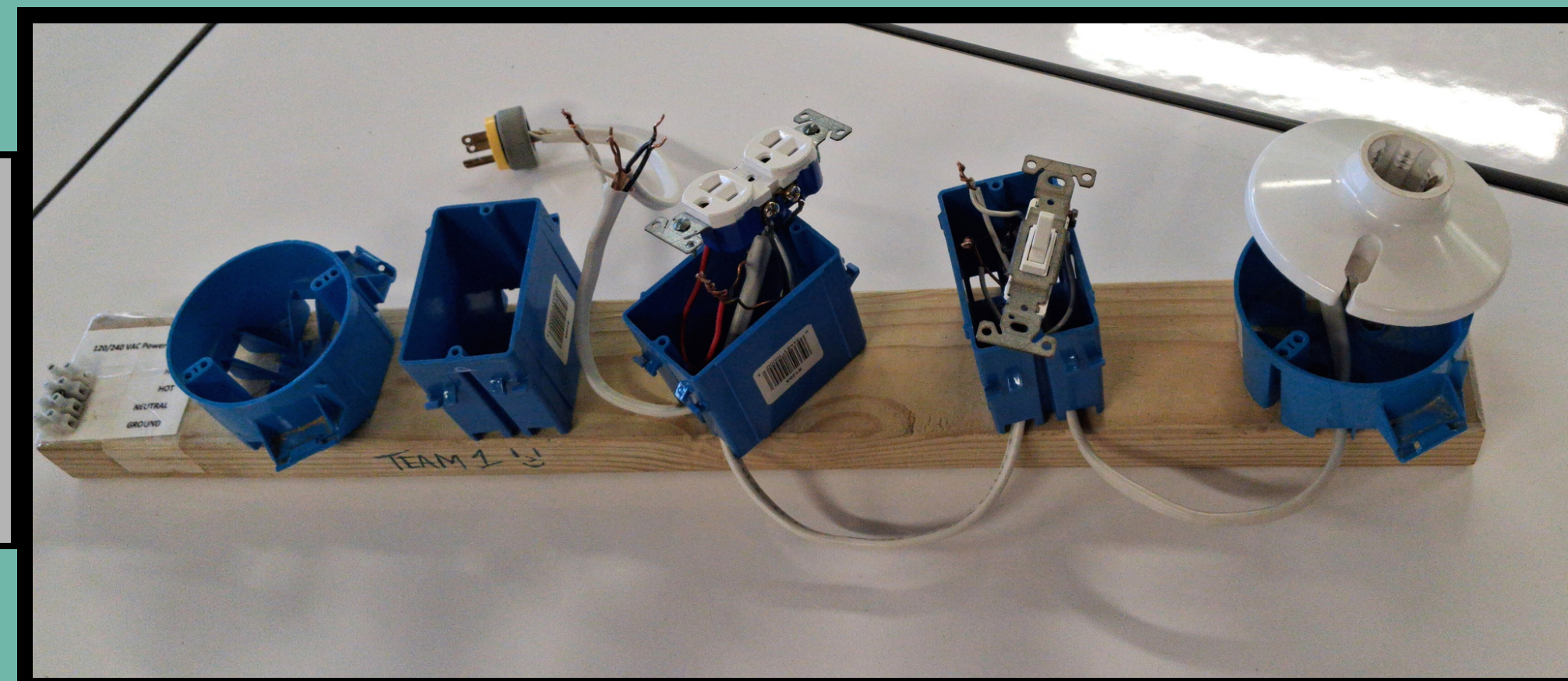
PURPOSE

- Determine the relationship between the quantity of SBAE educators' post-secondary training experience and their perceived importance of teaching electrical skills.
- Objectives: Evaluate correlations regarding
 - Electrical Safety
 - Electrical Switches and Receptacles
 - Electrical Connections
 - Electrical Testing



THEORETICAL FRAMEWORK

- Theory of Planned Behavior supports that the attitude of an educator regarding electrical skills can influence their instructional priorities
- Human Capital Theory suggests that electrical training can serve as an investment in educator competency, which may influence their perceived value of electrical skills



METHODOLOGY

- $n = 80$ over 4 years, electrical workshop for SBAE teachers
- Paper-based survey to evaluate the SBAE educator's electrical experience prior to an electrical workshop, and their perceptions on teaching 28 electrical skills before and after attending
- Post hoc reliability from first year; each the eight survey constructs scored above 0.869

RESULTS

- 73% traditional certification
- 60% no prior electrical experience
- Two skills in electrical safety had a p-value less than 0.05, and most skills had a null or weak correlation
- Some weak correlations showed directional change after participants attended an electrical workshop

Electrical Safety Importance	Pre-Importance vs. Quantity	Post-importance vs. Quantity
Identifying electrical safety organizations	-0.027	0.119
Using safety label codes and colors	-0.016	0.062
Using approved personal protective equipment	0.016	0.006
Using electrical hand tools	0.062	0.04
Using a test light	-0.006	-.262*
Using receptacle tester	-0.046	-.242*
Using a digital multimeter	-0.042	0.035

Note. * $p < .05$

CONCLUSIONS & RECOMMENDATIONS

- Currently, there is a severe lack of electrical experience and training for SBAE educators
- Provide electrical courses and training for both pre-service and active SBAE educators
- Expanding the scope of the study to include a broader range of electrical experiences could support usage of professional development opportunities as a tool to update educator instructional priorities