

INTRODUCTION

- Previous hands-on experiences may shape how students perceive their ability to learn and perform mechanical tasks.
- Experiential Learning Theory emphasizes learning through experience, reflection, and subsequent application (Kolb & Kolb, 2017).
- Social Cognitive Theory provides a complementary lens for considering beliefs about personal capability (Bandura, 2001).
- Scholarship on academic confidence distinguishes students' perceptions of themselves from demonstrated achievement (Sander & Sanders, 2006).
- The purpose of this focused qualitative analysis was to explore how students described previous mechanical experiences that they believed contributed to their confidence.

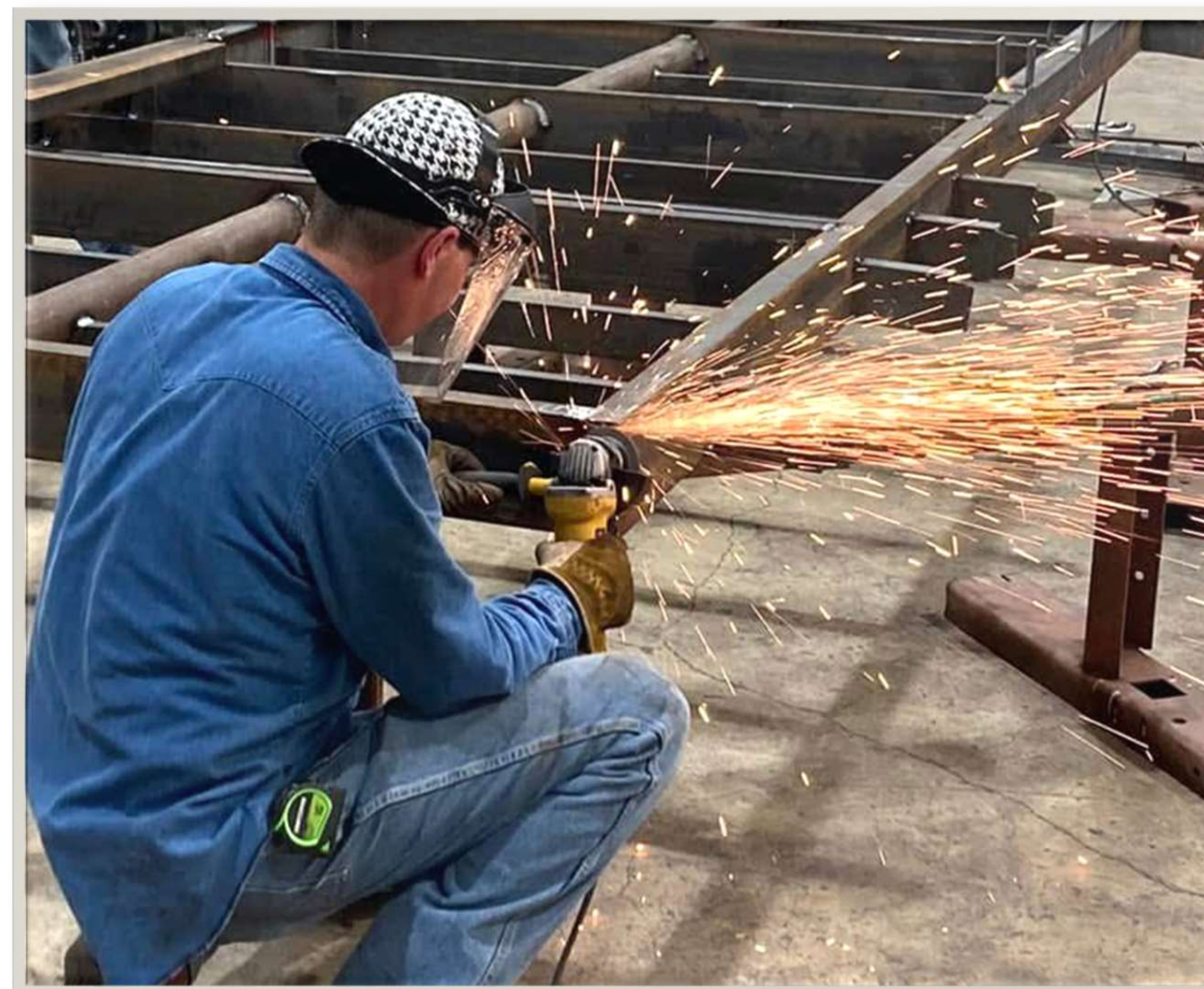
METHODS

- This analysis drew on open-ended survey responses from the Fall 2026 cohort of AGET 2303, Introduction to Agricultural Engineering Technology.
- All 43 enrolled students voluntarily participated in the broader survey.
- The present analysis focused on previous hands-on experiences and their perceived relevance to confidence in learning and performing new skills.
- Participants were identified by random numerical codes from 1 to 43.
- Findings are presented as descriptive patterns and illustrative accounts rather than numerical confidence scores or estimates of how frequently each pattern occurred.

FINDINGS

	Description	Student Examples
Repeated Practice	Students connected practice and improvement with increased confidence.	Student 29: Described increased confidence through repeated welding practice.
Successful Task Completion	Completing challenging projects helped students recognize their capabilities.	Student 37: Completing a welding test encouraged belief in being able to accomplish more. Student 24: Identified installing flooring as a confidence-building experience.
Supportive Guidance	Students described assistance from others as valuable to their improvement.	Student 4: Described improvement with a teacher's assistance.

Key Takeaway: Students connected confidence with what they accomplished through practice and the support they received along the way.



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DISCUSSIONS

- Survey findings offer meaningful insight into students' perceptions of how previous mechanical experiences contributed to their confidence in learning and performing new skills.
- Findings highlight the value of considering the quality and context of prior experiences alongside the extent of students' mechanical exposure.
- Purposeful practice, constructive feedback, and opportunities to recognize individual progress may support confidence development in introductory AGET courses.
- Identifying experiences students perceived as beneficial provides a useful foundation for responsive instructional planning.
- Future research should examine the relationship between perceived capability and demonstrated technical proficiency.