



# Fine-Tuning Success: Student Insights from the SFA Tractor Tech & ATMS Clinic



START

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## Student Participants:

36 ATMS Clinic  
40 Tractor Tech Clinic

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## CDE Experience:

First Year - 61.84%  
Returning - 28.95%  
Not Competing - 9.21%

3A

## ATMS Session:

Electrical Motors  
♥ 22.22% | 🚫 34.38%

Small Engines  
♥ 47.22% | 🚫 21.88%

Structures/Welding  
♥ 30.56% | 🚫 43.75%

3T

## Tractor Tech Session:

Components  
♥ 30.00% | 🚫 0.00%

Pre-Check/Bugs  
♥ 65.00% | 🚫 5.00%

Exam  
♥ 5.00% | 🚫 95.00%

## Framework:

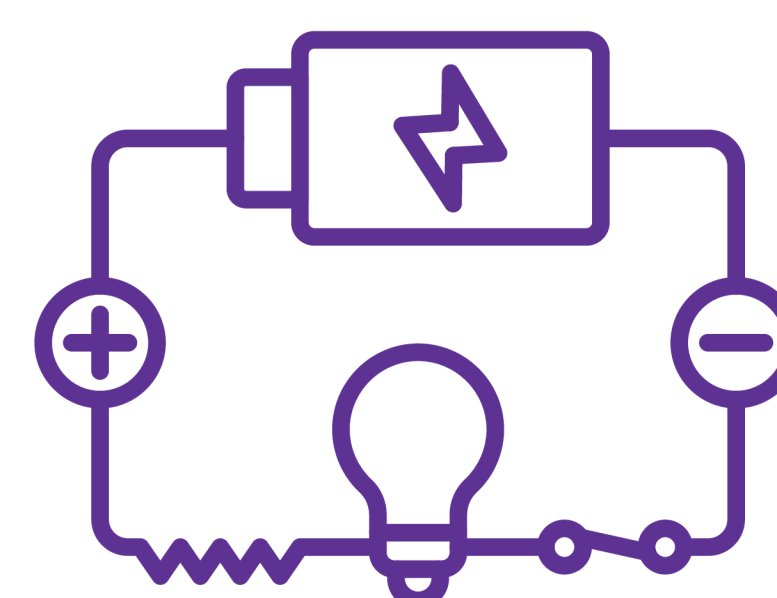
This study employed Kirkpatrick's Model of Training Evaluation (Kirkpatrick & Kirkpatrick, 2016), focusing on the Reaction level to capture students' perceptions, satisfaction, and engagement. By keeping attention on immediate feedback, the framework helped highlight what students valued most in the workshop, such as content, enjoyment, instructor effectiveness, and interaction.

## Methods:

A total of 76 SBAE students participated in the clinic, with groups divided between the Tractor Technician and ATMS workshops. Each student completed evaluations that included demographics, open-ended responses about their favorite and least favorite sessions, and Likert-scale ratings. The results were analyzed through thematic coding and descriptive statistics.

## Impact:

Results showed that the majority of participants felt more prepared for competition. Student feedback emphasized that both the content and personal enjoyment made the sessions successful, while mixed responses to testing suggested that it should remain supportive. Overall, structured workshops proved valuable for building confidence and provided clear direction for improving future sessions.



## Preparedness

👊 77.03% | 😞 6.76%  
👉 - M = 3.59 | SD = 1.19  
👎 - M = 4.39 | SD = 0.78

### ATMS

👊 77.14% | 😞 2.86%  
👉 - M = 3.85 | SD = 1.10  
👎 - M = 4.46 | SD = 0.05

### Tractor Tech

👊 76.92% | 😞 10.26%  
👉 - M = 3.22 | SD = 1.23  
👎 - M = 4.36 | SD = 0.89

## CDE Understanding

👉 52.05% | 😞 30.14%

ATMS  
👉 37.14% | 😞 37.14%

Tractor Tech  
👉 65.79% | 😞 23.68%



## Reasons

Content  
♥ 38.46% | 🚫 49.21%

Enjoyment  
♥ 35.38% | 🚫 34.92%

Interaction  
♥ 13.38% | 🚫 9.52%

Instructor  
♥ 9.23% | 🚫 4.76%

Other  
♥ 3.08% | 🚫 1.59%

## Recommend

👍 86.49% | 👎 6.76%

ATMS  
👍 82.86% | 👎 5.71%

Tractor Tech  
👍 89.74% | 👎 7.69%

## Exam Helpfulness

😄 71.62% | 😞 16.22%

ATMS  
😄 68.57% | 😞 17.14%

Tractor Tech  
😄 74.36% | 😞 15.38%

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8

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FINISH