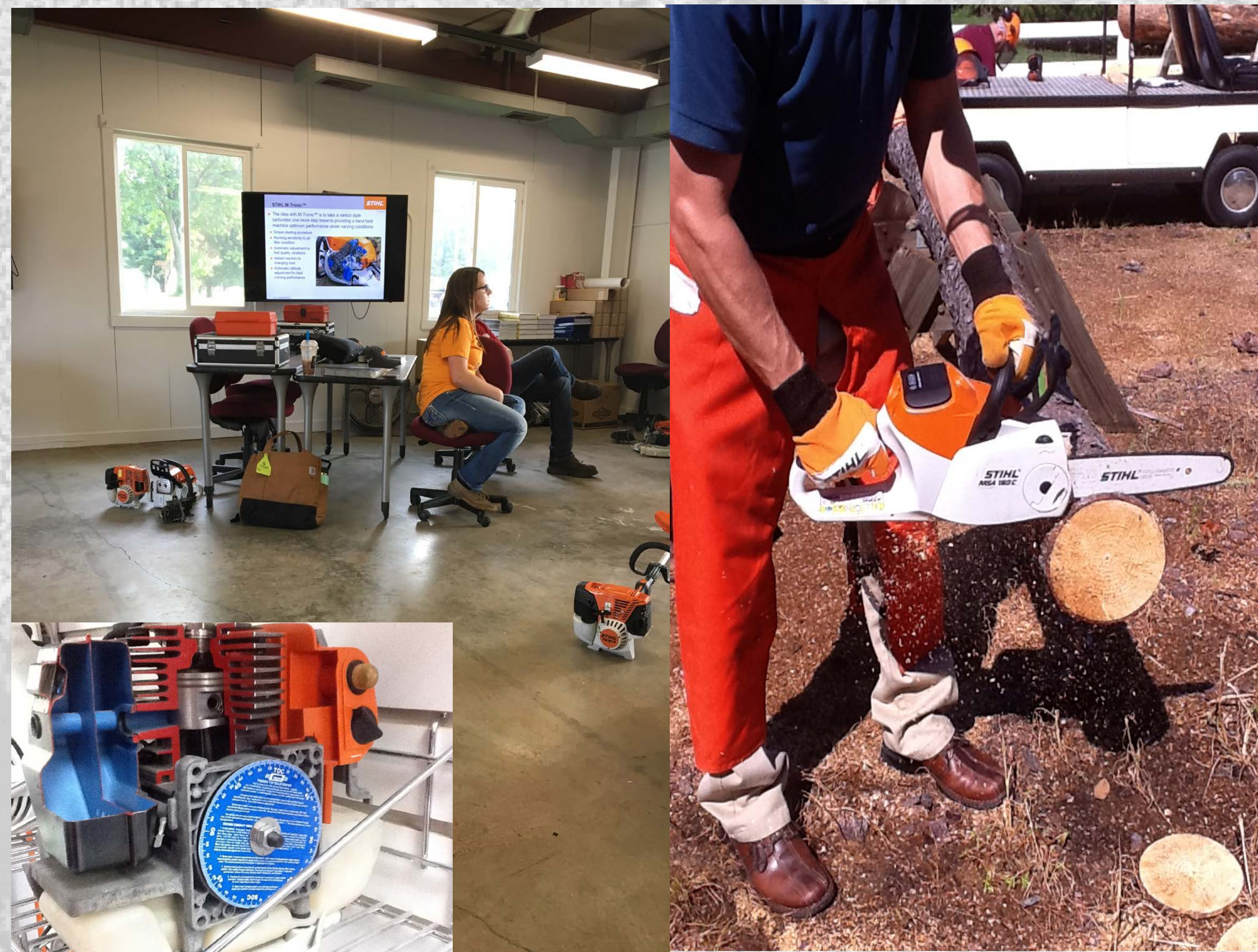


Introduction

- Small engine safety content area rated as one of the top ten important skills to learn
- Teachers needed more time in order to gain sufficient competence in small engines to feel effective in the classroom
- More opportunities for agricultural mechanics professional development
- Guided by the Concerns-Based Adoption Model



Results

Construct	Pre-test	Post-test
Importance	4.39; SD= 0.618	4.31; SD= 0.603
Competence	3.18; SD .0738	3.91; SD= 0.697
Curriculum	2.32; SD= 1.04	2.87; SD= 0.878
Ability	2.89; SD .0748	3.52; SD= 0.740

Methods

- A Pre-test/Post-test instrument was developed by the researchers.
- Six Agricultural Education Teacher Educators who teach small gas engines and four small gas engine industry trainers assisted with face and content validity
- Two of the teacher educators participated in the workshop and provided additional feedback
- Twenty teachers from multiple states participated in the study
- All constructs had a reliability score of 0.92 or higher



Purpose

- The purpose of the study was to evaluate perceived importance to teach two-stroke engine theory and safety.
- Identify the participants perceived competence to perform two-stroke engine theory and safety related skills
- Report participants perception of the curriculum available to teach,
- Analyze participants perceived ability to teach selected skill areas related to two-stroke engine theory and safety

Results

Item	Pre-test	Post-test
Carburetor Theory	2.58; SD= 1.02	3.74; SD= 1.16
Failure Analysis	2.75; SD 1.02	3.70; SD= 0.92
Troubleshooting	3.00; SD= 1.03	3.90; SD= 0.91
Theory	3.25 SD = 0.85	4.10; SD= 0.85
Mix-Lubed Four-Stroke Theory	2.90; SD= 1.02	3.65; SD=0.99

Conclusions & Discussion

Increased competence of teaching two-stroke engines
 Increased ability to perform two-stroke engine theory and safety skills
 Increased Awareness of curriculum available
 Recommended to provide additional professional development opportunities that continue to build upon the knowledge gained