

Public Abstract

First Name:Hannah

Middle Name:Lea

Last Name:Hemmelgarn

Adviser's First Name:Michael

Adviser's Last Name:Gold

Co-Adviser's First Name:

Co-Adviser's Last Name:

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Department:Natural Resources

Degree:MS

Title:

AGROFORESTRY EDUCATION FOR HIGH SCHOOL AGRICULTURE SCIENCE:  
A Case Study of Novel Content Implementation

High school agriculture science programs are recognized as meaningful arenas to reach young agriculture professionals as they gain a foundational understanding of their field. While sustainability is at the forefront of agriculture research and technological advancements, and is critical to student career readiness, the adoption of novel sustainable agriculture content in the high school curriculum has not been implemented for certain sustainable agriculture practices. Agroforestry represents one such content area that has been largely lacking in high school agriculture science classrooms, despite its relevance to modern agricultural advancements in sustainability for economic, environmental, and social resilience. Due to the contextual nature of content adoption by agricultural educators, the curriculum implementation process for novel content is dependent on an understanding of teacher learning, teacher self-efficacy, professional development, and curriculum modification. This case study of the process of novel content implementation examines the complexities of teacher sourcing, modification, and use of novel content, evaluates an agroforestry professional development program for teachers with varying levels of experience, and follows this group of teachers one year after the professional development program to investigate the relationship between teacher self-efficacy and novel content enactment. The importance of teacher-learning support networks and experiential learning in curriculum and professional development emerged as major themes for effective novel content implementation.