

# Unique Combination: Nuts and Unicorns Applying STEM Through Agricultural Education



Caryn Filson, Graduate Teaching Associate & Dr. Susie Whittington, Professor



## Introduction:

Science, technology, engineering, and mathematics (STEM) are a key part of the education agenda in the United States. The importance of STEM across the education curriculum will continue to increase. Agricultural education is the perfect venue for celebrating, sustaining, and applying real-life STEM concepts to learners.

## How it works:

Preservice nonformal/outreach agricultural educators make the STEM connection to affluent, first grade girls at a private institution through the Food and Fiber Day event. The partnership provides applied laboratory experiences for preservice educators, while meeting first grade state science standards through agricultural connections.

A relationship is formed between the preservice educators and the first grade girls through two parts. First, the preservice educators teach the girls about animal products and make butter at the elementary school. Several weeks later, the girls arrive to the university farm for a day-long event filled with educational stations designed and taught by the preservice educators, each meeting a different first grade science standard through hands-on agricultural experiences.

## Results:

The partnership has been a positive experience for all involved. The preservice nonformal/outreach educators have the opportunity to apply their knowledge of teaching methodologies in an authentic learning experience; preparing lessons to meet content standards, as well as getting hands-on teaching experience. The first grade girls, most who have no agricultural awareness, learn about science through production agricultural concepts.

## Advice to others:

Preplanning and communication is key to a successful Food and Fiber Day event. The instructors from OSU and the first grade teachers meet and communicate regularly, beginning six months prior to the event. Back-up dates are also put onto calendars in the event that something, such as weather, unexpectedly deter the event from occurring. The first grade teachers also give the preservice educators input on their ideas and lesson plans for the Food and Fiber Day. They provide feedback to the preservice educators to ensure their ideas and plans will work effectively and efficiently for first grade girls.

## Costs:

- 1) Faculty and staff need to devote the time and energy to prepare and coordinate the event.
- 2) Each preservice educator can use up to \$50 of departmental dollars to purchase supplies for their station.
- 3) Use of the university farm is of no charge for this event, however 'thank you' cards are purchased to extend our gratitude.

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