

Bridging the Gap: The Impact of Hands-On Field Experiences on Preservice Teachers Content Knowledge



Katharine Honeyman, Shane Wetzel, Ryan Best, and Jon Ramsey

Introduction

- SBAE teachers must have a **broad understanding** of the **agricultural discipline** and **master several content areas** (Harlin et al., 2007)
- Early career SBAE teachers **lack** both **content** and **contextual** knowledge (Harlin et al., 2007; Rice & Kitchel, 2015)
- Teachers felt their teacher preparation programs **did not** equip them with **sufficient content knowledge** to be successful (Rice & Kitchel, 2016a)
- In addition, they struggled to **apply** their content knowledge in **creating** meaningful and engaging **classroom lessons** (Rice & Kitchel, 2015; Rice & Kitchel, 2016a)

Results

- **Thirty-seven** preservice teachers **participated** in the **field experiences**
- Students **created** classroom lessons **utilizing** their **experience**
- Students connected **content knowledge** and **lesson creation**
- “It gave me **more information** and hands-on, **real-world experience**, and I think that will help me better **connect to the lessons** and be able to **teach topics better**”

Future Plans/Advice to Others

- **Oklahoma State University** will continue to incorporate **content knowledge acquisition** into **required pedagogical content courses**
- **Future** iterations of this course **will incorporate** a **broader range** of **agricultural content knowledge**
- **Teacher preparation** faculty should consider incorporating **field experiences** into **pedagogical content courses** to provide content and contextual knowledge

How it Works

- The instructional team **partnered** with the university's **meat processing facility** and **vegetable farm**
- Students spent two labs in the meat facility and two labs at the vegetable farm, receiving **hands-on experiences** and gaining **content knowledge**
- Students **reflected** on their experiences in the **AET journal**
- Finally, students **utilized** their **experience** to create a **ninth-grade classroom lesson**

Cost/Resources Needed

- **Individuals** who can **supervise** the labs and **provide quality feedback** regarding implementing content into the classroom
- **University farm resources** or **community partners**
- Subscription to **AET** is highly encouraged

