

## From Another Perspective: Conducting SAE Visits Virtually

### BACKGROUND

Adequately supervising SAEs often presents challenges for teachers.

- Can add work-related stress (King, Rucker, & Duncan, 2013)
- Impacts the number of hours spent working throughout the calendar year (Hainline, Ulmer, Ritz, Burris, & Gibson, 2015)

### HOW IT WORKS

1. Captured 360-degree and standard photographs from various locations at a student's SAE site
2. Used Tour Creator to build VR tour
  - Added POIs and 2D images to highlight / describe
3. "Virtual SAE Visit - Poultry" was distributed to local in-service and pre-service SBAE teachers.
  - Could be viewed in a browser or via the Google Expeditions App
    - Expeditions app allows the use of a VR viewer (e.g., Google Cardboard).

### RESULTS

- The reception has been overwhelmingly positive.
- Pre-service teachers identified potential uses in other areas of the SBAE program, such as for virtual field trips.

### IMPLICATIONS

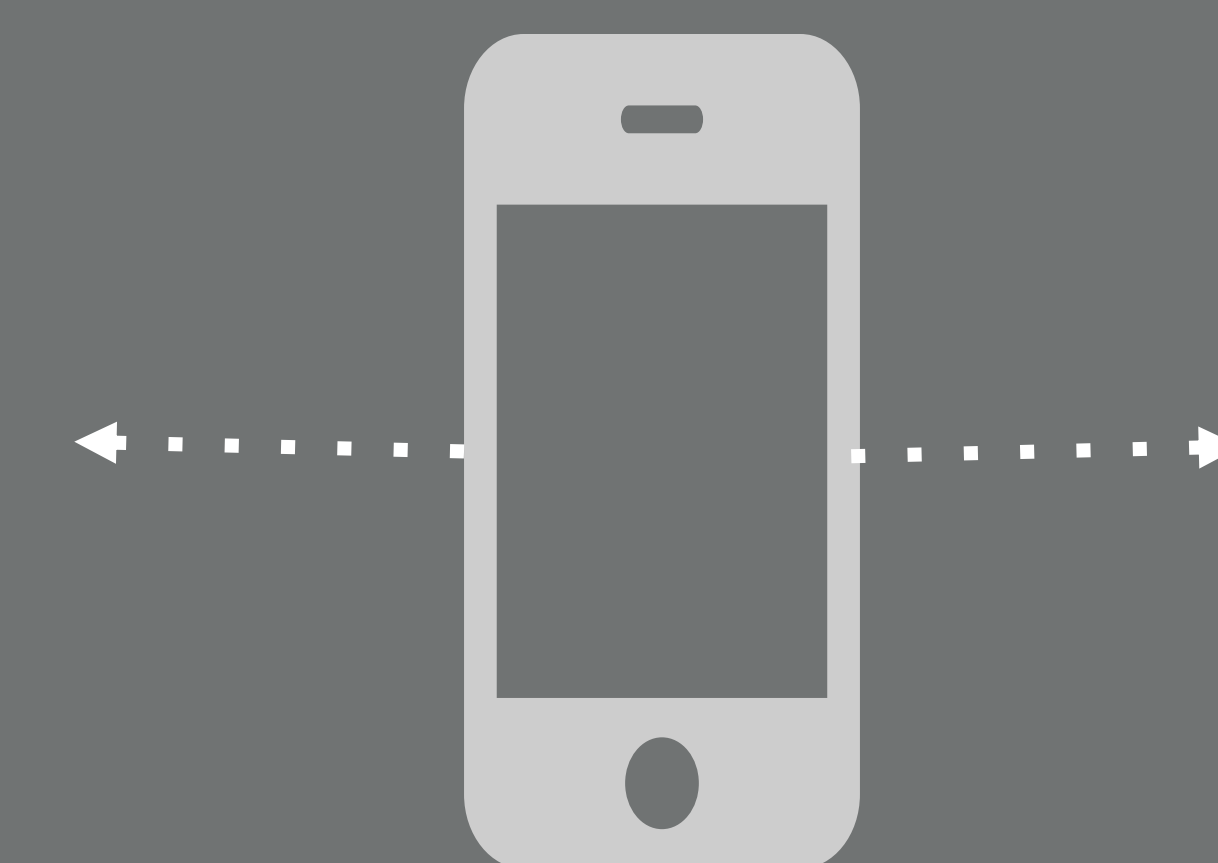
Virtual SAE visits offer several benefits:

- Alleviating administrative burden on SBAE teachers
- Reducing the amount of travel time for SAE supervision,
  - Allow for more SAE visits, albeit virtually
- Reduction of fuel consumption and vehicle wear and tear in comparison to traditional on-site visits.

Pre-service and in-service teachers believe VR SAE visits can save time and be an effective *alternative to traditional visits*



Virtual SAE Visit - Poultry



Scan the QR codes with a mobile device



Full Abstract

# AGGIE XR

### COSTS

- The primary cost associated with this project was time.
- For this project, the following equipment was readily available via the AggieXR Lab:
  - Ricoh Theta Z1: \$1,000
  - Ricoh Monopod: \$125
  - Google Cardboard VR Viewers: \$10
- For those needing to acquire the equipment, we would recommend the following:
  - Ricoh Theta V 4k camera: \$376)
  - Light stand: \$20
  - VR viewer: \$10
- The Tour Creator platform is free and requires only a Google account use.

### FUTURE PLANS / ADVICE TO OTHERS

- Refining the process and developing a training manual to empower students to take control of creating their own VR SAE tours.
- Develop / adapt SAE curricula to supplement virtual SAE visits for use in SBAE and agricultural teacher education programs.

 Dr. OP McCubbins  
Texas A&M University

Dr. Trent Wells  
Southern Arkansas University