

**Recruiting through a Pandemic: Engaging Secondary Students in the Agricultural
Education Profession Through a Virtual Experience**

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Introduction & Need for Innovation

Eck and Edwards (2019) concluded the shortage of qualified teachers in school-based agricultural education (SBAE) has been a long-term issue since its existence. Continuous instructor deficiencies in SBAE have been a concern dating back to the Smith-Hughes Act of 1917 (Hillison, 1987). According to Kantrovich (2007), one solution to the qualified teacher shortage in SBAE lies in the recruitment of additional teachers. Recruitment is crucial in solving the current and future shortcomings of qualified teachers in SBAE (Ingram et al., 2018). Historically, the Future Agricultural Education Teacher Academy (FAETA) served as a platform for 15 secondary students to explore agricultural education as a promising college major and career choice. However, due to the growing number of positive cases of COVID-19, all Oklahoma schools were ordered by the Oklahoma State Board of Education to move to distance learning for the remainder of the 2019-2020 school year beginning April 6, 2020 (Oklahoma State Department of Education, 2020). This state-wide closure forced the cancellation of all in-person secondary and post-secondary classes and extra-curricular activities including camps, conferences, and conventions for SBAE students. Thus, a virtual FAETA experience was needed to continue the recruitment effort of Oklahoma agricultural education. Using a virtual educational experience has been shown to directly affect student learning, overall engagement, and long-term educational planning (Murphrey et al., 2014). The need for an innovative recruitment experience during a pandemic was met using a virtual environment.

How the Innovative Program Works

During the spring of 2020, four experienced SBAE teachers worked in conjunction with Oklahoma State University's Department of Agricultural Education, Communications and Leadership to develop a five-day, virtual experience for 26 high school students who originally applied for the in-person academy. The virtual experience consisted of both synchronous (i.e., Zoom) and various asynchronous (i.e., video demonstrations, virtual agricultural tours, online discussions, lesson planning, and assessments) activities to engage all participants in a comprehensive virtual experience. Students were expected to complete three assessments reflecting the three-circle model of agricultural education in order to graduate the FAETA. Using the various virtual platforms used during the academy, the academy teachers will have the ability to connect and interact with the participants as they complete a series of benchmark assessments designed to further attract participants to the profession.

Results to Date/Implications

Twenty-six high school students signed up to participate in the five-day virtual academy. Of these, 20 students took part in every synchronous and asynchronous activity offered during the FAETA. The active participants were engaged in more than 10 hours of video conferencing with the academy teachers and collectively averaged five hours of time spent watching video demonstrations, participating in virtual agricultural tours, and completing assessments using

Canvas, the learning management platform for the FAETA. At the conclusion of the virtual academy, participants were asked to reflect on their experience by answering a variety of open-ended questions posed by the FAETA facilitators. These questions were designed to receive both feedback on the overall success of the virtual FAETA and provide a place for participants to personally reflect on their five-day encounter. A sampling of participants' comments to the question, "Describe your overall experience at the Academy," follow:

"Considering the circumstances of not being able to have a traditional academy, I really enjoyed this whole experience. I learned quite a bit and now have a better understanding of some more of the smaller details of being an ag teacher and what it takes to get there. This academy gave me several connections that I would gladly use later down the road to better me as a person in the ag industry as well as a potential future agriculture educator".

Participants were also asked to rank the likelihood of teaching agricultural education prior to the FAETA and to rank the likelihood of teaching agricultural education after the five-day experience (both on a 100-point scale). The respondents (n=16) averaged a ranking of 58.82 and 88.82 respectively.

Through the virtual academy, students were able to learn about the complex nature of a career in school-based agricultural education. Their overall engagement as a cohort tends to support Murphrey et al. (2014) and their position that virtual experiences have a direct effect on the long-term educational planning of students. Moreover, by these students sharing their personal thoughts on the experience, a measure of personal growth and willingness to pursue agricultural education as a career choice were captured and showed promise to the virtual program approach.

Future plans

Academy teachers intend to engage participants consistently throughout the next academic year with the aim to keep SBAE teaching on their career radar. A culminating experience is planned for the fall to re-affirm the participants' career intentions and share their experience with peers.

Cost/Resources

The cost of the academy was approximately \$30 per participant, including the virtual learning platform, FAETA t-shirt, certificate of graduation, and shipping costs. All of the expenses were incurred by the project and sourced through a partnership between the Oklahoma FFA Foundation and the Department of Agricultural Education, Communication and Leadership at Oklahoma State University.

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