

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

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Recruiting Through a Pandemic: A Way for High School Students to Engage in the Agricultural Education Profession Through a Virtual Experience

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. 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) has been facilitated by SBAE teachers, state agricultural education supervisors, and post-secondary instructors and 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 remaining part 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 experience during a pandemic was met using a virtual academy environment.

How the Innovative Program Works(ed)

During the spring of 2020, four experienced SBAE teachers worked in conjunction with Oklahoma State University's Department of Agricultural Education, Communication, and Leadership to develop a five-day virtual experience for 26 high school students who originally applied for the in-person academy. The encounter consisted of both synchronous (i.e., Zoom) and asynchronous (i.e., video demonstrations, virtual agricultural tours, online discussions, lesson planning, and assessments) activities to engage all participants in a well-rounded experience. Students were expected to complete assessments based on the three-circle model of agricultural education in order to be recognized for completing the academy. Facilitating teachers were able to produce a meaningful experience by using various virtual platforms.

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 academy. The active participants were engaged in more than 10 hours of video conferencing with the academy facilitators and collectively averaged five hours of time spent watching video

INNOVATIVE IDEA

demonstrations, participating in virtual agricultural tours, and completing assessments using Canvas, the learning management platform for the academy. 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 teacher facilitators. These questions were designed to receive both feedback on the overall success of the virtual academy and provide a place for participants to personally reflect on their five-day encounter. A sampling of the participants' comments to the question, "Describe your overall experience at the Academy," follows:

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. "I enjoyed this last week. It has definitely helped me see that being an Ag Teacher is just what I want to do."

The academy participants were also asked to rank the likelihood of them teaching agricultural education (on a 100-point scale) prior to the experience (58.82) and to rank the likelihood of them teaching agricultural education after the five-day experience (88.82), resulting in a 30% increase in the likelihood of teaching in the future.

As a result of 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, a measure of personal growth and willingness to pursue agricultural education as a career choice validating the virtual program were captured by participants' willingness to share their thoughts.

Future Plans

Academy facilitators encourage implementing virtual components to engage students. The virtual component of the academy will continue to be utilized and studied as a potential tool for encouraging SBAE students to consider the agricultural education profession.

Cost / Resources

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

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