

“What Would the Ag Department Do?”: Using Real-World Challenges to Prepare Future Agriculture Teachers

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Introduction/Need for Innovation or Idea

Beginning school-based agricultural education (SBAE) teachers often enter the profession with strong content knowledge but limited experience in departmental decision-making, conflict resolution, program management, and stakeholder relationships. Beginning teachers may also face unrealistic expectations from themselves, colleagues, and community members (Lemons et al., 2015). As one participant explained, “It’s difficult because you want to be accepted and you want to do well and be successful” (Lemons et al., 2015). Developing the self-efficacy to navigate these challenges requires experience. Practice-based opportunities allow preservice teachers to rehearse complex professional tasks in controlled settings (Rouse et al., 2023), while simulations and role-play provide safe environments to evaluate performance and build confidence (Evans et al., 2016). These experiences are particularly important in SBAE, where teachers must collaboratively manage instruction, FFA, supervised agricultural experience (SAE) programs, facilities, budgets, and community relationships. Experiential learning provides mastery and vicarious experiences that strengthen self-efficacy (Samuelsson et al., 2022) and allow candidates to practice managing FFA, SAE, and laboratory responsibilities before entering the profession (Furlong, 2022). Therefore, authentic, collaborative experiences in teacher preparation can strengthen professional confidence and better prepare candidates for the realities of SBAE teaching (Toombs et al., 2022).

How It Works

The purpose of this activity is to examine how role-playing authentic agricultural department scenarios influences preservice agriculture teachers’ self-efficacy related to collaboration, decision-making, and program management. According to Bandura (1994), self-efficacy develops through four primary sources: mastery experiences, physiological and emotional states, vicarious experiences, and social persuasion. Fifty-four students, including 40 females and 14 males, enrolled in Fresno State’s Introduction to Agricultural Education course participated in the activity. During the first four to five weeks of the course, students participated in team-building activities designed to develop relationships and establish rapport among classmates. Students were then organized into simulated agriculture departments based on the regional and sectional structure of agricultural education within the university’s service area. Departments consisted of four to seven members, with each group selecting a department chair and FFA advisor. Throughout the semester, the simulated departments conducted structured department meetings. Each department received an agenda that required members to complete a departmental task or collaboratively address an authentic professional scenario. The scenarios progressively increased in complexity and required greater levels of communication, collaboration, and problem-solving. In some scenarios, individual department members contributed to the problem, while others required the entire department to develop a collective response or procedure. **Scenario One: Department Responsibilities.** Departments completed an annual responsibility chart, assigning duties so that each teacher served as an FFA advisor for a chapter meeting, coached at least one LDE or CDE team per semester, supervised county fair SAE projects, attended three agricultural advisory committee meetings, and participated in six agricultural teacher association meetings. **Scenario Two: Department Resources.** A teacher

used a school van that another department member had reserved and loaded with supplies for an after-school project. Departments determined how to resolve the immediate conflict and establish procedures to prevent similar problems. **Scenario Three: FFA and SAE Participation.** A newly hired, alternatively credentialed agriculture teacher did not recognize the value of FFA and SAE programs and refused to participate in related activities. Departments developed strategies to address the situation and encourage the teacher's involvement. **Scenario Four: Inclusive Agricultural Mechanics.** A student who uses a wheelchair enrolled in an introductory agricultural mechanics course. Departments identified three to four accommodations that would provide the student with safe access to shop tools and meaningful participation in project activities. **Scenario Five: Department Conflict.** Ongoing interpersonal conflict and gossip among department members negatively affected the program's reputation. Departments developed strategies for addressing both the internal conflict and external communication. **Scenario Six: School Farm Crisis.** Seven pigs died after arriving at the school farm on February 10, it is now April 1st. As concerns were raised by students, parents, and administrators, departments developed a response to address the situation and communicate effectively with stakeholders. **Scenario Seven: Supporting a Colleague.** A department member returned to work after having a child and was breastfeeding. As spring activities increased, the administration was reluctant to accommodate her needs. Departments identified two to four actions they could take to support their colleague's participation in program activities while balancing family responsibilities. At the conclusion of the semester, students completed a survey assessing their perceived self-efficacy based on Bandura's Teacher Self-Efficacy Scale (TSES). The assessment examined self-efficacy related to programmatic decision-making, influencing school resources, supervising SAE projects, facilitating FFA activities, and influencing decisions made by agricultural department colleagues.

Results/Implications

This collaboration provides pre-service teachers with an opportunity to deepen their self-efficacy through role-playing. For example, this solution for scenario three. *"We should also explain to the new teacher how FFA/SAE performance links to program funding and shows the district how well our Ag Department performs. By directing their attention and giving them resource links like aged.org, it can also help them feel less stressed about the amount of work they will have to do, as explaining all the work that is expected of them could overwhelm them."* Data from the TSES indicated that 40.35 percent of respondents felt that they could have "Quite a bit of influence" in overall programmatic decision-making.

Future Plans/ Costs Needed

Future plans include a pre-test implementing the TSES at the beginning of the activity pre-test and a post-test to measure changes in self-efficacy through the experience. New issues will be investigated by the instructor at the annual California Agriculture Teachers Association (CATA) Conference, fall sectional CATA meetings and county fairs through discussion with peers in the profession. A SAE survivor series of scenarios is being developed to incorporate during the SAE unit of instruction to expose teacher candidates to common and potential issues they may come across advising SAE projects as an inservice teacher. The costs associated are primarily instructor time in scenario development. Classroom materials are zero cost for students to complete.

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