

**Learning to Do: SAE Management through Hands-On Laboratory Experiences**

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### **Introduction/Need for Innovation or Idea**

Roberts and Dyer (2004) stated, “Creating effective agriculture teachers is imperative for the long-term sustainability of agricultural education programs.” The faculty at Texas Tech University and its agricultural teacher education program are responsible for preparing future agricultural teachers to teach and supervise all supervised agricultural experiences, including livestock projects. Supervised Agricultural Experience (SAE) is defined as “the application of the concepts and principles learned in the agricultural education classroom in planned, real-life settings under the supervision of the agriculture teacher. (Talbert et al., 2022, p.418). According to past graduates of the agricultural teacher education program at Texas Tech, they lacked a course that prepared them to handle traditional SAEs properly and safely, such as livestock projects. A need existed to properly educate the next generation of agricultural teachers prior to student teaching and graduation. To do so, the university adopted the addition of a course to do exactly that, teach future agricultural teachers to select, care for, and execute traditional supervised agricultural experiences.

### **How it Works/Methodology/Program Phases/Steps**

In the course, “*Advanced Supervised Agricultural Experience (SAE) Management*,” it delved into each livestock species and the experiential learning component of the three-circle model that all agriculture teachers are required to incorporate in their curriculum. Experts and professionals qualified in ethics, recordkeeping, and safety were brought in one day a week with a lecture-based lesson that corresponds with their field. Once the students received the lecture information and material, they met off campus at a local school project center and had a hands-on learning experience to put the lecture into practice.

During the course, the students were required to complete the following:

1. Attend and participate in county livestock validations for each species (cattle, hog, lamb, and goat) and reflect on their experiences. This includes the agriculture teacher’s roles and responsibilities, student and parent interactions, and ways that they could improve the validation process.
2. Create a project supervision notebook that includes information for the various livestock species.
3. A scenario based AET recordkeeping proficiency/star application.
4. Submit an ethics plan which will include specie specific rules, quality counts, show rules, and how they plan to manage parental involvement in SAEs.
5. Weekly and end of semester reflection activities.

### **Results to Date/Implications**

17 Texas Tech student teachers completed the “*Advanced Supervised Agricultural Experience (SAE) Management*” course in the Fall of 2023 which is a 3-hour credit. In three months, these students were taught by experts from Texas FFA, ShowSmart, Quality Counts, and local high schools’ agriculture teachers. The students were shown the school project center’s facilities, equipment, and livestock projects while the expert addressed topics such as, selection, daily care routines, etc. They also attended three livestock validations to gain hands-on knowledge of how this process works. At the end of the semester, the students enrolled in the course were given a survey to determine if the course gave them the confidence to manage livestock projects once they entered the teaching profession.

#### Survey Responses:

- Student A: “The *Advanced Supervised Agricultural Experience (SAE) Management* course was the most interesting and student-centered learning course I have taken over my college career. Being able to talk to experts in different fields gave me the opportunity to learn like no other class before.” Lastly, they stated, “As agricultural educators we must know how to manage projects and this course has given me the confidence to do exactly that.”
- Student B: “SAE Management has been undoubtedly the most useful class that I have taken because of the hands-on learning experiences and the demonstrations taught in lectures. I know this will be extremely useful when providing my students with diverse agricultural education, as well as, giving every student the ability to have a successful SAE.”
- Student C: “As an out-of-state student, I’ve always felt one step behind. This course has eased my nerves and made me aware of the responsibilities that I, as a Texas ag teacher, would experience and must handle.”

#### **Future Plans/Advice to Others**

Texas Tech plans to continue offering this course to student teachers to strengthen their knowledge and skills of managing traditional supervised agricultural experiences (SAEs). In the upcoming year, Texas Tech aims to bring in more specialists to maximize the student’s education on how to manage SAEs. One of the main challenges in managing this course is logistics and scheduling. Many of the experts utilized are agricultural teachers that have busy schedules themselves and when asking these experts to participate and teach must be thoroughly planned out beforehand (weeks to months in advance). Another recommendation is to ensure that the lecture and laboratory time is long enough to thoroughly cover each species to the degree that these students can safely and knowledgeably work with them. Lastly, the students are having to transport themselves to and from the project centers so having a way to provide transportation for them would guarantee that each student makes it on time and all at once.

#### **Costs/Resources Needed**

This course relies on professionals providing their personal time, equipment, and livestock for the students to observe and use. The use of facilities, equipment and livestock has not been burdensome to any of the presenters. However, students must travel to the destination where the laboratory sessions will take place, and these were no further than 30 minutes from the

university. Furthermore, the students and professionals must have a time commitment to this course because of the travel time required before and after each lab session. Inherently, students and professionals will have travel expenses to and from laboratory sessions while taking part in this course.

### References

- Roberts, T. G., & Dyer, J. E. (2004). Characteristics of effective agriculture teachers. *Journal of Agricultural Education*, 45(4), 82–95. <https://doi.org/10.5032/jae.2004.04082>
- Talbert, B. A., Croom, B., LaRose, S. E., Vaughn, R., & Lee, J. S. (2007). *Foundations of Agricultural Education*. Purdue University Press.