

**Clucks to Bucks: Simulating a School-based Enterprise SAE**

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

In order for agricultural education to grow, we will need to recruit pre-service teachers from a variety of backgrounds, including students who do not have a traditional high school agricultural education experience (Marx, Smith, Smalley, & Miller, 2017). Yet, as agricultural teacher education programs, we need to prepare all pre-service teachers how to plan, develop, and manage a comprehensive agricultural education program that includes a balance of classroom, SAE, and FFA (Ball & Torres, 2010). SAE is a program unique to agricultural education that is difficult to conceptualize without having engaged in SAE activities in some way or form. Further, none of our current students had any prior exposure to the new SAE for All framework and many of the “new” SAE options. Thus, we sought to develop a classroom activity that would allow our pre-service teachers to personally experience an authentic SAE. The innovation we developed was a simulated poultry production school-based enterprise (SBE) SAE that was integrated into our undergraduate junior level Advising FFA/SAE course at North Dakota State University during the 2019 fall semester.

### **How it Works**

In order to develop the SBE experience, the instructor utilized the SAE Individual Learning Guide for the School-Based Enterprise SAE (National Council for Agricultural Education, 2018) to guide the project components and assessments. There were 10 students in the class and they were tasked with raising and marketing broiler chickens as a part of a profitable business. They were responsible for creating a business plan (and getting approval from a board of directors), raising the chickens (daily feeding/watering/basic husbandry), assisting in the processing of the chickens, marketing the final product, and keeping accurate records throughout the duration of the roughly eight week project.

### **Proposed Learning Outcomes**

- Participate in the planning and conducting of a school-based enterprise SAE
- Foster the development of teamwork and advanced organizational planning skills
- Involve students in the hands-on application of animal science technical skills as they relate to the production of broilers
- Develop record keeping skills by entering data into the AET and other record keeping documents

In order to accomplish the proposed learning outcomes, the instructor scheduled two in-class planning meetings and two Board of Directors Meetings (i. initial proposal, ii. present outcomes). During the first planning meeting on September 12, students were encouraged to set roles, group norms, a communication plan, research the project, and create a budget. During the second planning meeting, the students were to: share findings, create the presentation, and plan a practice time. The student’s business plan components were outlined in the SAE for All Independent Learning Guide (National Council for Agricultural Education, 2018). A few of the seven components required were a business description, market analysis, competitor analysis, and goals and learning outcomes. All materials were developed and shared in a Google Docs Folder. On October 3<sup>rd</sup>, the students proposed their school-based enterprise to a board of directors made up of School of Education faculty who offered feedback and ultimately approved a loan for the students to use to raise their 28 broilers.

## **Innovative Idea Poster**

The chicks arrived on October 9 and were housed at the NDSU Animal Nutrition and Physiology Center. Students independently organized and managed a care schedule. Chore times and daily bird health updates were presented on a Facebook Group. The students worked with the research building manager to order feed and bedding for the birds. After 7 weeks, the students and instructors processed, packaged, and froze the finished 25 broilers (3 birds died prior to processing) at the research facility under the supervision and guidance of the facility manager. The students calculated a break-even price and set the price for the 5-6 lb. processed chickens at \$15 based upon pricing of other locally grown poultry products found at farmer's markets and area grocery stores. The students were able to sell enough birds to pay for each of them to bring one processed chicken home to their families without the enterprise losing money. On December 10<sup>th</sup>, the students presented their final project to the Board of Directors. The students shared their final income and expense report, learning outcomes, a summary of their experience, and a recommendations they would make to a teacher who wanted to do the same project in their program (including if they wanted to do this again).

### **Results/Implications**

Overwhelmingly, the students expressed the positive outcomes from engaging in this project. The students completed self-assessments and assessments of their peers based upon the group norms they established during their early meetings. They also self-assessed their level of accomplishment related to the learning objectives they outlined at the beginning of the project. All students expressed their learning increased greatly or slightly through the project (some students had strong skills due to previous experience and thus only increased slightly). No one indicated they did not learn anything related to the desired learning outcomes of the project. Anecdotally, the instructor felt the students were able to have deeper conversations about what SAEs are and what the purpose of SAE is within the total agricultural education program. Additionally, the students expressed excitement regarding the SBE SAE and were able to brainstorm many different ways they could integrate meaningful SBE SAEs into their future programs. Finally, for those students who did have agricultural education backgrounds, this activity really allowed them to reflect upon the changes to SAE due to SAE for All, which they expressed in class discussions.

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

As with any student-led project, we recommend clear expectations and a well-scaffolded project planned prior to turning it over to the students. It is essential that students be allowed the opportunity to develop their own learning outcomes, goals, and team norms. Though chickens worked well for our program, this concept could be applied in other teacher education programs either as another type of SBE, such as growing bedding plants or offering a business service, or as an example of other SAE options, such as conducting a service learning project or doing agriscience research SAEs as a class.

### **Costs/Resources Needed**

To raise 25 birds, we invested roughly \$300 initially for the purchase of the chicks, feed, and bedding, most of which was returned upon sale of the whole chickens. A facility which allows raising chickens is also required. We recommend working with your campus animal science department if possible. It may also be easier to collaborate with an instructor in animal sciences who already has the necessary training and approval to work with animals on campus.

**References**

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