

Teaching Tips/Notes



Exploring Animal Science Applications to Extension in a Capstone Course

Introduction

At Purdue University, capstone courses are a requirement for every Animal Science undergraduate student. Capstone courses are designed for a senior-level student to choose an animal species and learn in-depth about that industry. Purdue offers capstone courses in beef, dairy, horses, swine, sheep, companion animal, and poultry. In the course, students learn how to apply the knowledge they have learned in past Animal Science (ANSC) courses as well as apply the teamwork skills and technical skills to solve a problem that mirrors a problem relevant to the industry and communicate the proposed solutions to their peers (Purdue University-Office of Academic Programs, 2014). This teaching tip was carried out with a group of interested students in the ANSC 443-Swine capstone class.

The Land Grant Extension system is a resource for many of these graduating students. The ANSC courses as they stand currently don't seem to offer students who study ANSC an opportunity to explore what extension educators do or how their training in ANSC may help them. There are various state 4-H Events that are held on Purdue's campus every year. This innovative project option allows students to experience an Extension-related youth event in the context of an Extension volunteer. Then for the term project, put themselves in the role of an Extension Educator as they were to create a similar program on a larger scale (a regional contest) using the takeaways they had as an Extension volunteer.

Procedure:

The teacher of the capstone class, in this case, is an Extension Specialist. We chose a well-established 4-H youth event in the swine species discipline called Jr. Pork Day. This educational event is a 1-day hands-on workshop that encourages youth to pursue higher education and helps with application of relevant knowledge to their 4-H Swine projects (Purdue Extension, 2016; Rusk et al., 2002). For a full description of an evaluation of the event, there was a study published in the *Journal of Extension* (Rusk et al., 2002). Students interested in an Extension option for their team term project express their intent to do this early in the year. The students in the ANSC 443 class have three options to choose for their team term project. They can (1) design a swine farm for a specific purpose adhering to industry guidelines, (2) redesign an existing farm to adhere to changing mandates or for expansion, (3) or adopt the innovative Extension project. Students who choose this project will volunteer in an area chosen from a list of duties needed for Jr. Pork Day to ensure a successful project. Students should have free choice of the roles they will serve in and each student should serve a different role if possible as this will inform the design of a larger-scale project. Teams will create a notebook that will contain data they collected from volunteer experience (as well as participant surveys from the program) as well as their plan for a larger regional event. The plan should include personnel needs, area of the state targeted, marketing strategies, number of participants they expect, time of year, animals needed and protocol for using these animals, expertise needs, location

possibilities, plans for evaluation, and any other pertinent information. This notebook should be written in such a way as it can be replicated. Students are also required to orally present with the use of a PowerPoint and pictures, if allowed. The oral presentation will be in front of the rest of the students in the ANSC 443 class. Team members were required by the professor to evaluate their other team members and themselves on promptness to meetings and commitment to teamwork using a Likert scale.

Assessment

Students receive 130 points for this project. The oral report to the rest of the class is worth 40 points. During the oral report, the students were evaluated on presentation skills, organization, accuracy of the material and that each group member spoke for the same length of time. Oral presentations were in front of the other students in the class and the Extension Specialist.

The written report which is worth 90 points demonstrates students' use of writing skills. Completeness of the report is very important. Students will be required to plan the regional Pork Day and create a report of their plans as well as the takeaways they took from volunteering at Jr. Pork Day. The first area to be included in the report is a summarization of takeaways from volunteering. Students must discuss the roles they held, and the activities they helped lead as well as summarize the events as a whole. Next, the students will discuss their plans for the regional event. The students will need to discuss personnel needs (number and expertise), area of Indiana targeted, marketing strategies, number of participants you expect and why, ages of participants, time of year, animals needed and biosecurity protocol for using these animals, expertise needs, location possibilities, plans for evaluation of the event, as well as any other pertinent information to describe the plans. The last section in the written report will require students to decide if they could plan a Regional Pork Day event with the resources that the Jr PQA and Jr. Pork Day had and to justify their reasoning.

Submitted by—

Emma C. Allen and Allan Schinckel

Purdue University, West Lafayette, IN