

Implementing Soft Skill Development, Leadership Competencies and Critical Thinking Styles in an Advanced Animal Production College Course

Introduction/ Need for Innovation

In conversation with the poultry scientist at California State University, Fresno (Fresno State), in regards to curriculum in advanced poultry classes, a department leader of a large poultry and agricultural production company stated:

The poultry industry recognizes the need to prioritize developed soft skills in new hires, with the acknowledgment that the willingness to learn; to think critically under pressure; and possessing strong leadership, team and communication skills; over having an established knowledge base regarding live operations is priority (Jeff Walsh, personal communication, 31 May 2018).

Throughout the research it has been shown that in addition to technical skills, employers seek applicants who possess soft skills such as communications, both written and oral; critical thinking competencies; team building; and problem solving skills (Bennett, 2002; Friedel, Irani, Rhoades, Fuhrman & Gallo, 2008; Jones, 1996; Sandlin, Price & Perez, 2018). Yegani (2009) emphasized that research has shown communication skills, conflict resolution, “and a general knowledge of business and economic principles were among the highly rated skills that the poultry industry expects from recent poultry science graduates” (p. 1340). Sandlin, Price and Perez (2018) recommended instructors of natural science degree programs incorporate both technical and soft skill development into their curriculum as employers from these said fields seek to hire employees with both skill sets. The incorporation of a soft skill and leadership competency development can impact team dynamics, improve stakeholder communications and relationships and increase employability of students upon graduation. Through understanding the needs of potential employers for students graduating with a Bachelor of Science degree in animal production, it was the goal of the authors to revise the curriculum for the advanced production course to reflect the emphasis on soft skills in new hires.

As part of the Animal Science and Agricultural Education Program at [University], classes are offered in production and management for beef, sheep, hogs, dairy and poultry. In the poultry science degree plan, students enroll in classes related to poultry science and housing management. Following an introduction to poultry production course that introduces technical skills related to the poultry industry, students enroll in Advanced Poultry Production (APP) as part of a degree program. APP is designed with the goal of developing students to be highly valued candidates for employment within the poultry industry upon graduation.

Entry level poultry management positions require the ability to mitigate complex problems that include decision making about poultry health and wellbeing, team development and conflict resolution, crisis management, and assessing logistical and budgetary issues. Moreover, the poultry industry experiences a constant evolution of best management practices for production as industry perspective changes by the time the student becomes employed. Instead of concentrating only on technical skills, to further the goal of developing students for career success within the poultry industry, the department has increased collaboration among animal science faculty and agricultural education and leadership faculty to focus on increasing

employability competencies in graduates.

How it Works/ Program Phases/ Steps

A professor in agricultural leadership has partnered with a professor in poultry science who works closely with the industry. For the APP class, the professors teamed up in designing curriculum to address technical skill and soft skill development through lectures and application, both in the classroom and at the poultry facility. Skills and leadership competencies developed in the class include; public speaking and communication, team dynamics, personal leadership development, change and crisis management, and critical thinking. Theoretical concepts are then applied through reflection, industry visits, simulations and interaction with members of the public outside of the poultry industry. Students are also assessed on perceptions of leadership and on critical thinking skills. The University of Florida Critical Thinking Instrument (UFCTI) is used to measure critical thinking styles ranging between two constructs; engagement and seeking information.

As part of the poultry science degree, a commercial poultry facility providing hands-on experience is housed on campus. This broiler chicken production facility houses chickens throughout the year and runs through student employment. The facility provides the application step to conceptual knowledge taught in the classroom. The facility is supported by local industry, which provides support through establishing educational and hands on experiences.

Results to Date/ Implications

The APP course utilizing the two faculty members and using curriculum that incorporates both technical skills and soft skills has been taught one time at [university]. A pre-test /post-test was administered to students to measure change in perception and soft skills, as well as the UFCTI. The pretest/posttest showed development and application of soft skills and leadership competencies. UFCTI scores indicated an equal distribution of engagers and seekers with several students exhibiting ability to engage in both styles. Based on observations and feedback, the interactions students had with people outside of the classroom, industry and public, were positive, defining of the overall effectiveness of the course.

Future Plans/ Advice to Others

As a result of positive reviews from faculty, administration and the industry, the team will be continuing to use this format for the APP course in the future. Other animal science faculty in the department have been supportive, and are recommending elements of this type of development be implemented in other advanced production classes. Curriculum should be developed based on industry needs and by utilizing current leadership and soft skill development curriculum and practices.

Costs/Resources Needed

Professors/Instructors with expertise in production, leadership competencies and soft skill development are needed for the partnership. For the professors, there is a time commitment to design the curriculum to incorporate lecture time for soft skill development. Additionally, resources are needed to purchase the UF Critical Thinking Inventory assessment. Students do not need to pay any additional fees for the class. Innovative Idea

References

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