

Teaching Tips on Conducting a Virtual Judging Workshop Session During Covid-19 Remote Teaching

Introduction

Livestock evaluation requires scaffolded pedagogies to develop and practice higher order learning through application of individual decision-making skills. In livestock judging, students must analyze the phenotypic characteristics as well as a wide array of genetic predictors (Expected Progeny Differences and Performance Data) to evaluate their value as seedstock in breeding operations or as market livestock destined to enter the food chain as animal protein products. The methodical preparation of these observational, critical thinking and associated communication skills needed to defend their decisions is challenging even with opportunities of live animal specimens.

When converting to online studies, especially during the midst of a pandemic, it is important to maintain key aspects of the curriculum found within agricultural studies to preserve student learning outcomes. Animal sciences heavily lends itself towards visual studies when it comes to selecting and evaluating animals with the most desirable combination of traits to achieve the target goals of specific livestock operations.

Conducting virtual judging workshops through resources such as Zoom allow for students to still engage in learning the skills necessary for performing this incredibly important aspect in the field of animal agriculture. By utilizing pre-recorded videos of livestock that are more readily available today, instructors have the ability to maintain the simulation of real time experiences around livestock judging. Some may argue that the same lessons can be taught by using still images. However, while picture have their own uses as teaching tools, they do not present the same opportunity for learning as does viewing live, whereby moving animals can be observed and evaluated. The use of videos is especially important to observe correctness of skeletal design and skeletal width that is virtually impossible to evaluate when only using still pictures.

Procedures

Scaffolding Key Concepts and Knowledge. When considering organizing a virtual judging workshop, it is important that beforehand students have foundational knowledge on a variety of areas including livestock anatomy, species specific terminology, economically important traits, and the characteristics of the ideal animal of each species. When judging livestock based on structural traits, students should have the knowledge and abilities to recognize structural correctness, degrees of muscling, body shape and balance, and feminine or masculine features. Pictorial and video examples can be placed in the course LMS and students tested for readiness skill levels. A technique that may be used is to create a game whereby the instructor selects a topic (ex. structure, composition, etc.) whereby students are then challenged to generate multiple ways animals can differ in this category. Particular attention should also be focused on the use of genetic predictors (Expected Progeny Differences and Performance Data) in conjunction with phenotypic traits as students need to show understanding and competency with incorporating both in final decisions relating to judging livestock for seedstock purposes. If judging on the basis of health, have students recognize the “abnormal” vs “abnormal” signs and/or qualities of an animal and have them demonstrate their understanding of the appearance of indicators of a healthy or unhealthy animal. Low scores on the quiz or tests should guide encouragement for students to return to the study materials and retesting.

Simulation of Live Animals. Consider sharing pre-recorded videos in sets of four, and while sharing them, have students actively write down their own observation on each animal. After showing the footage of the livestock in a set, have the student discuss what they thought about each of the animals and allow them to share their ideas and reasoning behind their answers. A sound exercise is to have students share with fellow students in a Zoom breakout room. With the ability to record the s online exchanges, each student can be asked to collaborate on providing one sentence which can then be used to build a coherent analysis and set of reasons. A playback of video and/or audio allows the students to participate with the instructor in providing feedback and critique which enables students to clearly understand ways to improve in their analysis. Guide students through discussion as needed and introduce additional higher order skills to consider in the judging exercise. Once dialogue between the students has ceased, replay the videos of the set and share what you believe the students got right and what they either got wrong, overlooked or could improve upon. Pause the video as needed and use the virtual pointer to identify specific features to show the students what to look for and why.

As the students become more confident in their abilities to assess livestock, begin to introduce the importance of certain traits for specific breeding needs. For example, giving students scenario prompts that mimic a producer’s needs such as a replacement heifer for a herd that is aiming to improve milk production, or a producer that is wanting to produce bulls that will improve carcass quality (more intramuscular fat deposition/marbling) in his resulting progeny. These added challenges provide students the opportunity to weigh the importance of specific traits and gives them real world examples of situations producers encounter.

Assessment

Utilizing a virtual judging workshop for online learning allows students to observe animals in a way that mimics a real time learning experience. This exercise also, by nature, encourages student engagement, and allows students to practice guided independence in forming their abilities to evaluate animal phenotypic traits, genetic predictors and health indicators. Activities such as a virtual workshop provide students the opportunity to connect what they have previously learned in readings and lecture with a real-life skill, such as observing and judging livestock in as close to real time situation as possible. Instructors can ask students to answer sets of custom questions and then swap responses among students to score the answers or a peer. Use of a rubric to score and assess the overall progression of achieving the learning outcomes of the module or course can also be used.

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