

Animal science lesson plans meet the needs of 4-H volunteers

AT A GLANCE

UI Extension 4-H Youth Development created animal science lessons plans that were grab-and-go guides for volunteers to use in their clubs. 4-H volunteers found the lessons helpful.

The Situation

The 4-H program continues to reach more youth annually. In fact, in 2018 the numbers of youth enrolled in Idaho's 4-H club program increased by 3%. According to the Extension Services-237 report from that same year, animal science projects were those with the highest numbers of youth enrolled across the state. With the increased growth in the club program and the amount of animal science participation, there was a need for more volunteers. We found that many new volunteers had limited or no animal science education.

The teaching methods in other states using animal science lesson plans required training 4-H staff and having the 4-H trained staff conduct the lessons. This method was not feasible for the growing number of youth participants, the number of topics, the number of clubs and distant locations of market animal clubs throughout Idaho.

Our Response

In an effort to bring more awareness to animal science information and skills, as well as provide resources to our volunteers, over 60 peer-reviewed Animal Science Lesson Plans, developed by UI Extension educators at the county and state level, were introduced. These



4-H youth participating in lamb judging, utilizing skills gained from the animal science lesson plans. Photo credit: Scott Nash.

lesson plans focused on essential elements that the National Science Foundation recommends when developing science-based curriculum. The lesson plans were also designed to be used by the 4-H volunteer during club meetings. They include all information and instruction necessary to teach the topic, even if the volunteer did not have prior knowledge of the lesson plan subject area.

A major objective was to assist our volunteers in teaching these topics. To accomplish this, the lessons were developed to include all pertinent information for the instructor. Our lesson plans were unique because all necessary materials, which included the experiential activity, questions to ask, handouts and preparation resources, were presented in one document. The topics

of the lesson plans represent a wide variety of information from quality assurance, health, nutrition, showing and grooming, facilities and management, recordkeeping, and reproduction and selection. Another objective was to make sure these lesson plans were accessible to anyone interested, which was accomplished by publishing them to our University of Idaho Extension 4-H Youth Development website.

Program Outcomes

In order to assess the effectiveness of the lesson plans from the volunteer's point of view, we sent a survey out statewide to enrolled livestock volunteers. The distribution of the survey was through the Qualtrics survey platform, emails were sent through the 4-H Online system to the livestock volunteers, and the survey was completed by 154 volunteers in Idaho.

Since 4-H asked each livestock club to complete five lessons throughout the year, a majority of respondents taught five to six lessons. What did surprise us, however, was that 39% of the respondents taught more than six lessons to their club.

We asked the volunteers additional questions to help us gauge the scope of how the animal science lessons were used in the club setting. All statements were posed as agree/disagree questions to the livestock volunteers. One of our goals was to make the animal science lessons be grab-and-go teaching tools that anyone could use without prior animal science knowledge. Over 86% of the survey respondents agreed that they were able to use the lessons as a guide to teach the topic in their club. Additionally, 84.6% of volunteers stated that they were able to find a lesson to fit their club needs. This was an encouraging response considering we have released 60 lessons and will continue adding more as available resources for our livestock volunteers.

FOR MORE INFORMATION

Alaena Ruth, Extension Educator • University of Idaho Extension, Bonneville County • 208-529-1390 • aruth@uidaho.edu

Scott Nash, Regional Extension Educator • University of Idaho Extension, Eastern District • 208-317-4375 • snash@uidaho.edu

Tim Ewers, Extension Specialist • University of Idaho Extension • 208-885-4080 • tewers@uidaho.edu

20-21-aruth-animal-science • 7/21

Another goal of the animal science lesson plans was to increase the youth's knowledge and skills in animal science related topics. In order to gather information about the success of this goal, we asked the volunteers who delivered the information to the youth about the impact of the lessons on the youth in their clubs. Most (82.1%) of the volunteers agreed that the lessons better focused youth on specific topics, 66.6% of those that responded indicated that the lessons helped youth set goals, and only 11.8% of respondents did not think that the animal science lesson plans helped youth gain animal science skills. The overwhelming majority of volunteers surveyed about the lesson plans agreed that the lessons increased youth learning, aided youth in setting goals, and enhanced the youth's skills related to animal science topics.

Furthermore, a goal in writing the Animal Science Lesson Plans was to help our volunteers feel more confident and prepared for their club meetings. Considering over 67% of livestock volunteers who participated in the survey responded in agreement with feeling better prepared for their club meetings and less than 14% of respondents disagreed that the lessons helped them overall as a club leader, we felt the job of the lessons is being accomplished.

When UI Extension educators wrote the animal science lesson plans, we had intentions of increasing skills for 4-Hers and confidence for volunteers. This study showed that the lessons are bolstering our 4-H program in all the ways we had hoped by giving all 4-H volunteers access to pertinent and accurate information that was then shared with their 4-H club. Also, with the addition of the lessons into club meetings, volunteers were more prepared and confident which helped them provide practical education to the youth with minimal preparation. The communication of consistent material through the lesson plans across Idaho allowed for the volunteers and youth to be confident they were gaining applicable animal science skills and knowledge during their 4-H year.