

10-1-2002

Teaching Youth Through 4-H Animal Science Workshops

Clinton P. Rusk

Purdue University, cr@four-h.purdue.edu

Krisanna Machtmes

Purdue University, kmachtme@purdue.edu



This work is licensed under a [Creative Commons Attribution-Noncommercial-Share Alike 4.0 License](https://creativecommons.org/licenses/by-nc-sa/4.0/).

Recommended Citation

Rusk, C. P., & Machtmes, K. (2002). Teaching Youth Through 4-H Animal Science Workshops. *The Journal of Extension*, 40(5), Article 21. <https://tigerprints.clemson.edu/joe/vol40/iss5/21>

This Ideas at Work is brought to you for free and open access by the Conferences at TigerPrints. It has been accepted for inclusion in The Journal of Extension by an authorized editor of TigerPrints. For more information, please contact kokeefe@clemson.edu.



October 2002 // Volume 40 // Number 5 // Ideas at Work // 5IAW7



PREVIOUS
ARTICLE



ISSUE
CONTENTS



NEXT
ARTICLE

Teaching Youth Through 4-H Animal Science Workshops

Abstract

The Animal Sciences Workshop for Youth is an intensive 3-day training at Purdue University. The goal of the workshop is to educate high school aged youth about animal production practices while stimulating their minds to think about new and improved ways to raise animals. By bringing 4-H youth together with Animal Science professors, the workshop serves to teach and recruit students at the same time. Since 1973, this significant educational program has affected more than 8,000 youth delegates from 11 states and British Columbia. 94% of the delegates attending in 2000 found the workshop to be a positive learning experience.

Clinton P. Rusk

Assistant Professor

Internet Address: cr@four-h.purdue.edu

Krisanna Machtmes

Program Evaluator

Internet Address: kmachtme@purdue.edu

4-H Youth Department
Purdue University
West Lafayette, Indiana

Introduction

The Animal Sciences Workshop for Youth began in 1972, when two Purdue faculty members were seeking a new forum to teach livestock management skills to 4-H youth. Their goal was to educate youth about animal production practices, while stimulating their minds to think about new and improved ways of raising animals. By bringing 4-H youth together with Animal Science professors at Purdue University, the founders of the workshop felt they could teach and recruit students at the same time. An intensive 3-day training resulted from the collaborative efforts of an Animal Scientist and a 4-H Youth Development Specialist. Over the years, the following objectives have evolved for the Animal Sciences Workshop for Youth:

1. To develop and foster life skills through positive interaction with others.
2. To teach scientific principles of Animal Science to young people.
3. To increase the awareness of animal industry issues among youth.
4. To inform participants about careers in animal agriculture and educational opportunities at Purdue University.
5. To prepare delegates to share what they learn at the workshop with others in their communities.

Program Description

Initially, the workshop focused on beef, dairy, horses, poultry, sheep, and swine. In 1989, the School of Veterinary Medicine was brought into the program, and the first rabbit workshop was implemented. A year later, dairy goat and aquaculture workshops were added. In 1999, the workshop expanded to include companion animals and veterinary science, which attracted over 40

participants the first year.

In addition to specie workshops, a variety of educational means have been utilized to accomplish the workshop objectives. In the 1995-1997 workshops, Purdue faculty members have incorporated sessions on the Internet and town hall meetings to help stimulate the thinking of workshop delegates. Prior to the workshop, the committee selected five current topics of special interest to the livestock industry. Delegates were assigned one of these topics at the opening session and given several opportunities to work in teams to learn both the pros and the cons of their issue. Research was conducted in organized sessions on the Internet, where faculty members had bookmarked helpful sites. On the final morning of the workshop, the delegates gathered to have a town hall meeting and openly discuss their findings on the issues. Media specialists were brought in to serve as moderators and offer a critique of each group's performance.

In 1998, the workshop committee opted for a skill-a-thon quiz bowl combination as an alternative to the town hall meeting. Delegates were pre-assigned to three-person teams, which included no more than one individual from any one species. On the final morning of the workshop, these groups rotated through 75 skill-a-thon stations, where they were presented with questions to answer, equipment to identify, or problems to solve. The four groups with the highest score from the skill-a-thon competition were brought before the rest of the delegates for a quiz bowl. The two winning quiz bowl teams faced off to determine the champion team.

To pay for housing and meals, workshop delegates currently pay a \$90 registration fee. An additional \$5,000 - \$10,000 of support is generated on an annual basis as a result of the generosity of animal-related state associations, agricultural enterprises, and private individuals who realize the educational value of the workshops.

Accomplishments and Impact

From the first 3-day workshop in 1973, this significant educational program has affected families in all 92 Indiana counties and more than 8,000 youth delegates from 11 states and British Columbia. The 225 delegates in attendance at the 2000 Animal Sciences Workshop for Youth were surveyed using an instrument designed to describe the demographic characteristics of workshop participants and measure the impact of the workshop itself. The survey instrument included six demographic questions, 10 statements to be answered using Likert-type scale (strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree, and three open-ended questions. Analysis of the survey data revealed the following information:

- a. 94% found the workshop to be a positive learning experience.
- b. 85% learned information that would help them better manage their 4-H animal project(s).
- c. 85% indicated their understanding of the technology used in Animal Sciences had increased as a result of attending the workshop.
- d. 78% were motivated to share the information they had learned at the workshop with others in their community.
- e. 85% indicated the workshop had increased their desire to pursue a college degree.
- f. 88% indicated their impression of Purdue University had improved as a result of attending the workshop.
- g. 92% indicated they would encourage others to attend the Animal Sciences Workshop for Youth.
- h. 91% enhanced their communication and teamwork skills.

Qualitative Responses

Delegates were asked to describe the best part of the workshop in an open-ended question. Some of their responses follow.


- "The best part of the workshop was going to the beef farm and doing an ultrasound."
- "I liked meeting new people and learning up-to-date techniques for working with animals."
- "It was fun to watch the necropsy of a pig."
- "The best part was getting to do hands-on activities with the sheep."
- "I learned a lot from the dissection of a broiler and a layer." "The best part of the workshop for me was getting to artificially inseminate a gilt."

When asked how the workshop could be improved, participants gave the following responses.

- "I would prefer to visit a dairy goat farm rather than have the goats brought to campus."
- "I would like to have more hands on activities with the horses, like getting to ride a little."
- "I would like to visit a rabbitry and receive more showmanship training on rabbits."
- "I would like to learn about other companion animals besides cats and dogs."

Conclusions

The Animal Sciences Workshop for Youth is creating a positive learning environment for youth, teaching scientific principles of Animal Science, and informing participants about careers in animal agriculture and educational opportunities at Purdue University. Survey results indicate the workshop motivated 78% of participants to share the information they learned with others in their community.

[Copyright](#)  by *Extension Journal, Inc.* ISSN 1077-5315. Articles appearing in the Journal become the property of the Journal. Single copies of articles may be reproduced in electronic or print form for use in educational or training activities. Inclusion of articles in other publications, electronic sources, or systematic large-scale distribution may be done only with prior electronic or written permission of the [Journal Editorial Office, joe-ed@joe.org](#).

If you have difficulties viewing or printing this page, please contact [JOE Technical Support](#)