

EVALUATION OF A LIVESTOCK ETHICS CURRICULUM FOR HIGH SCHOOL YOUTH

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Abstract

The purpose of this study was to evaluate the effectiveness of a livestock ethics curriculum developed for high school students in Agricultural Education classes. The three hour curriculum was taught by Keli Brubaker to 305 students enrolled in eight Indiana High School Agriculture programs. Data were collected using a pre-test/post-test experimental design and both tests were administered by the researcher to ensure consistent and detailed instructions were given to students. The McNemar test in SPSS was used to evaluate pre-test/post-test responses. Participants increased their awareness and knowledge of the overall principles involved in making ethical choices when faced with decisions in youth livestock programs. Students improved their understanding of the consequences associated with making unethical choices when faced with decisions in the youth livestock program. Participants were better informed and thus, more likely to make an ethical choice when faced with a decision in the youth livestock program as a result of the case study analysis. The researchers concluded that a livestock ethics curriculum is beneficial for students in high school Agricultural Education classes. Additional research should be done to determine if students will make an ethical choice when faced with a decision in a real life situation.

Introduction

Livestock programs are a vital part of both the 4-H and FFA organizations. The purpose of the youth livestock program is to teach young people how to feed, fit, and show their animals and to provide an opportunity for personal growth and development of the young person. Youth livestock programs also provide an opportunity for young people to develop character, which includes aspects such as responsibility, respect, trustworthiness, fairness, caring, and citizenship (Josephson, 2002). By developing these qualities, youth have an opportunity to become better citizens.

Youth livestock programs provide an opportunity for youth to raise animals and compete against one another at livestock shows, where there are usually awards at

stake such as cash, banners, trophies, and chairs. The desire to win money and prizes brings about the competition aspect of the program. A competition is an activity where someone wins and others lose (Fetsch & Yang, 2002). The competition for premiums has tended to shift the objectives for participation in livestock projects from the core values and educational principles that are central to youth livestock programs to a profit-making venture for youth.

Keith and Vaughn (1998) studied the value of competitive 4-H events as perceived by the parents of 4-H members. The most common problem identified by participants was excessive parental involvement. The second most common problem perceived by parents was unethical practices. Students involved in FFA were found to have similar perceptions of

unethical practices in youth livestock programs (Mounce & Terry, 2001).

The word ethics is often interchangeably used with the terms “values” and “morals”. Ethics refers to “the principles that define behavior as right, good and proper” (Josephson, 2002, p. 3). It also refers to what we believe is right and wrong, good and bad, or fair and unfair (Rollin, 1995). Our behavior is defined by our actions, so the right thing to do often depends on the best reasons to perform an action. The thing we ought to do is the ethical thing to do (Comstock, 2002).

Over the last decade, ethics have become an important issue in several parts of society. *Report card 2002: The ethics of American youth* found a rise in cheating, stealing, and lying over the last ten years among high school students. The survey of 12,000 high school students indicated the number of students who stole something from a store in the past 12 months increased from 31% to 38%, while the percent of youth who lied to their parents or teachers also rose considerably (Josephson Institute of Ethics, 2002).

The same report found that 74% of the students said they cheated on an exam at least once in the past year. The reasons students gave for cheating were peer pressure, teacher pressure, and parental pressure. Taylor, Pogrebin and Dodge (2002) found that the greater the parental pressure placed on students for success, the greater the chances that cheating will occur.

Cheating not only affects the individual cheater, but it also affects those around him or her. If students cheat, they are keeping someone else from reaping the true benefits or rewards. The act of cheating also affects the persons' reputation. Friends, family, or other members in the community may no longer trust a person who disregards the rules.

In the last decade, there have been several occurrences at major livestock shows where individuals have been caught breaking the rules. In 1994, eight exhibition animals were disqualified at the Ohio State Fair (Moser, 2003). The 2003 Illinois State Fair disqualified the grand champion steer because of a drug violation (Wills, 2003). Due to the rise in issues pertaining to ethics

and cheating, a negative image has been placed on youth livestock programs throughout the country.

It is important that youth understand there is a much broader responsibility than individual honors, financial gain, or even individual misconduct. They must understand that the actions of a single competitor can affect the image of all youth involved in the livestock industry. A single misdeed by one individual can lead to a negative portrayal of all youth livestock programs.

The consequences of these actions can be understood through an ethics lesson. Part of any ethics lesson is to understand that you do what you believe is right, but you also take responsibility for your actions (Johnson, 1995). What you believe is right may not always coincide with another's beliefs.

Theoretical Framework

In order to eliminate unethical behavior, it is important to understand why people make the decisions they do. This study was based upon Lawrence Kohlberg's theory of moral development, which is the increasing ability to differentiate and integrate the perspectives of self and others while making moral decisions. Moral development is the product of an interaction between the child's cognitive structures and the structural features of the social environment. The capability for complex perspective taking and for understanding abstract concepts is associated with advances in moral reasoning. Kohlberg's theory states that moral development is promoted by social experiences which produce cognitive conflict and provide a child with an opportunity to take the perspective of others. Kohlberg also contends that moral thinking can be advanced educationally using social interaction, cognitive conflict, a positive moral atmosphere, and democratic participation (Kohlberg, 1969).

Although Kohlberg's theory does not relate directly to real world agriculture, it does help identify the age at which youth are more likely to move from one developmental stage to another. In the current study, youth were the focus of the

ethics education program since most adults have already reached the upper stages of moral development, according to Kohlberg's theory. The higher the stage, the harder it is to influence an individual's ethics.

Kohlberg's model is comprised of three hierarchical levels, each containing two stages. At the Pre-conventional level, moral reasoning is controlled by external rewards and punishments. Children functioning at this point show no internalization of moral values. They do what is right based on what the rules say. Individuals at this stage choose to perform an action in order to avoid punishment (Kohlberg, 1969).

The second level is Conventional Reasoning, which includes individuals who have internalized certain standards, but the standards are often those of others, such as parents, teachers, societal figures, etc. Individuals at this level of moral reasoning do the right thing to avoid the breakdown of a system when working in a group. They also do the proper thing in order to be seen as a good person in the eyes of those around them (Trevino, 1986). Kohlberg places most adults in our society in the Conventional Reasoning level of moral development.

The final level of Kohlberg's moral development, the Post-conventional reasoning, includes those individuals who have completely internalized moral standards and no longer make decisions based upon others' standards. They tend to follow ethical principles that are self-defined. Very few adults ever reach the Post-conventional level.

Prior ethics work by Rusk and Machtmes (2003) found that certain demographics such as: grade in school, gender, years enrolled in 4-H livestock projects, and previous livestock ethics training helped explain part of the difference between pre and post-test scores amongst participants in their study.

Purpose of the Study

The purpose of this study was to evaluate the effectiveness of a livestock ethics curriculum developed for high school students in Agricultural Education classes. Ethics have become important in youth

livestock programs throughout the country. Some of the major issues that have been addressed include: false ownership of animals, physical alteration of the animal, illegal drug use, and excessive involvement of professional fitters.

Because of these unethical practices, livestock show officials have become more aware of the practices that exhibitors and/or their parents will engage in to win. Mounce and Terry (2001) indicated a need for ethics education among agriculture students as a result of their study on the perceptions of unethical practices in FFA competitions. In order to stop the unethical practices from occurring in any organization, education is needed.

The ethics curriculum for this research was developed, implemented, and evaluated to determine the effect of teaching ethics to high school youth in agricultural education programs. The research questions tested included:

- 1) Are participants aware of the principles involved in making ethical choices when faced with decisions in youth livestock programs?
- 2) Are participants able to determine whether certain practices at a youth livestock show are ethical or unethical?
- 3) Will participants make ethical choices when faced with decisions in youth livestock programs as demonstrated by real life case study analysis?
- 4) Will demographics such as current grade in school, gender, years enrolled in 4-H, years enrolled in FFA, years enrolled in beef, swine, sheep, horse, dairy, and other livestock projects, or previous participation in a livestock ethics curriculum; help explain the difference in pre and post-test scores amongst participants.

Methodology

The current study focused on advancing ethics education by developing a curriculum that involved student interaction, conflict, and a positive moral atmosphere. Tools used

in the curriculum included a video tape (Goodwin, 1996), classroom discussion, and case scenarios that involved ethical choices when faced with specific situations. Previous research (Goodwin, Briers, Murphy, 2002; Rus, 1997) has shown that an increase in ethical knowledge can result from a livestock ethics video program. A pre-test/post-test was chosen for the quasi-experimental design, and the researcher administered the tests before and after teaching the curriculum, thus allowing students to receive detailed and consistent instructions on how to fill-out the questionnaire.

The curriculum began with a general overview of ethics. The lesson then provided information on character development and its relationship to youth livestock programs. Students participated by answering questions and generating ideas on how to demonstrate ethical behavior in livestock programs and other areas of life. The Goodwin ethics video provided participants with decision-making tools to use when involved in livestock programs. A more detailed interactive discussion took place following the video.

Finally, students participated in case scenario evaluation developed using objectives similar to those used by Comstock (2002). The five objectives used were: accessibility, plausibility, philosophical effectiveness, drama, and coherence. The scenarios were written so students could follow what was happening and understand the situation. The cases were based on actual occurrences and described situations youth might face in the livestock program.

Tomlinson (1996) suggested that dividing the scenario into the following steps: the situation, what happened next, and then what happened; is an effective way of helping students learn. Each part of the scenario featured discussion questions students could use while evaluating the situations. The curriculum was divided over three days of teaching for a total of two and a half hours of instruction.

The questionnaire was developed to collect demographic information from the participants, measure knowledge gained from the ethics curriculum, and identify

whether students were able to evaluate a case scenario and make an ethical choice when faced with a decision involving youth livestock programs. Students were asked to list their: current grade in school, gender, years enrolled in 4-H, years enrolled in FFA, and years enrolled in the following livestock projects: beef, swine, sheep, horse, dairy, and other. Participants were also asked if they had previously participated in a livestock ethics curriculum. If they marked "yes", they were asked then to identify an example of an unethical situation involving livestock. Responses to the questionnaire helped the researcher determine student awareness of unethical practices occurring in the youth livestock program.

The questionnaire allowed students to answer questions pertaining to ethics in the youth livestock program. Twelve multiple choice questions were asked that related to material covered during the instruction on ethics and character development. Eight questions asked students to determine if a given response to a particular livestock situation was ethical or unethical. One question asked students to list three of the four standard questions used to determine whether a decision regarding livestock projects is ethical or unethical. Each test question related to the material presented throughout classroom instruction, and each question was designed to test the knowledge students gained from the curriculum.

The final section of the pre-test/post-test was a case scenario evaluation that allowed students to use the tools they learned in the ethics instruction to determine different aspects of a situation. This case study was similar to the ones presented in class. This evaluation was helpful in determining a student's ability to make an ethical choice when faced with a specific situation.

Pilot testing was conducted using an animal sciences class at a local high school. Keli Brubaker taught the ethics curriculum to the Agricultural Science students and administered the same pre-test and post-test that was to be given to participants in the current study. The purpose of the pilot testing was 1) to validate the evaluation tools and 2) to identify any design flaws present in the curriculum instruction. As a

result of pilot testing, an additional case scenario was added to the curriculum.

Reliability for the instrument was tested using the Kuder-Richardson Formula 20, (KR20). The KR20 is a special case of Cronbach's alpha, for ordinal dichotomies. An alpha of .72 was obtained for the instrument used in this study.

Identification of Participants

Three-hundred five agricultural education students from the following Indiana high schools participated in the study: Belmont High School, Benton Central High School, Clinton Central High School, Dekalb High School, Rennselear High School, Rossville High School, Tri-County High School. The students were enrolled in either an *Animal Science* or *Fundamentals of Agricultural Science and Business* course at the time of the study. The schools in the study were selected because of their strong agriculture and livestock programs.

The researcher visited each school the week prior to administering the program and gave each student a pre-test that included a participant questionnaire. It was important for students to answer the questions in numerical order without changing any answers once complete. If the students did not know an answer, they were asked to pick the one that sounded the most logical for the multiple-choice questions. If students did not know an answer on the fill-in-the-blank questions, they were asked to write in "I do not know" or "N/A" to ensure the question was read. Once the students completed the surveys, the researcher collected each one separately to ensure the questionnaire was complete.

Upon completion of the livestock ethics curriculum, data were entered and analyzed in the Statistical Package for the Social Sciences (SPSS Version 11.5 for Windows [Computer Software], 2000). Descriptive

statistics (frequencies, means, medians, percentages, and standard deviations) were used to analyze data. Data comparing overall pre-test/post-test scores were evaluated using a paired sample t-test. Data comparing individual questions on the pre-test/post-test were evaluated using the McNemar test, which is a 2X2 classification table used to evaluate the difference between paired samples.

Data was also compared between groups determined by the demographic questions. Overall scores were compared using a repeated measures analysis between subject groups over time. The change in time and any differences among groups were evaluated.

Results

To determine the impact of the livestock ethics curriculum, participants in the study were given a pre-test one week prior to the curriculum being taught. A post-test, with identical questions, was administered following completion of the curriculum. The questionnaires were compared to determine the impact of the livestock ethics curriculum. Three-hundred five students participated in the instruction, but only 268 subjects were included in the study, because 37 students were missing a pre-test or a post-test due to absenteeism.

Demographics

The distribution of participant's grade in school is presented in Figure 1. There were 146 freshmen (54.5%), 53 sophomores (19.8%), 37 juniors (13.8%), and 32 seniors (11.9%) who participated in this study. Results from a repeated measures analysis over time showed that all grade levels improved their test scores from the pre-test to the post-test, but there was no significant difference between the grade levels.

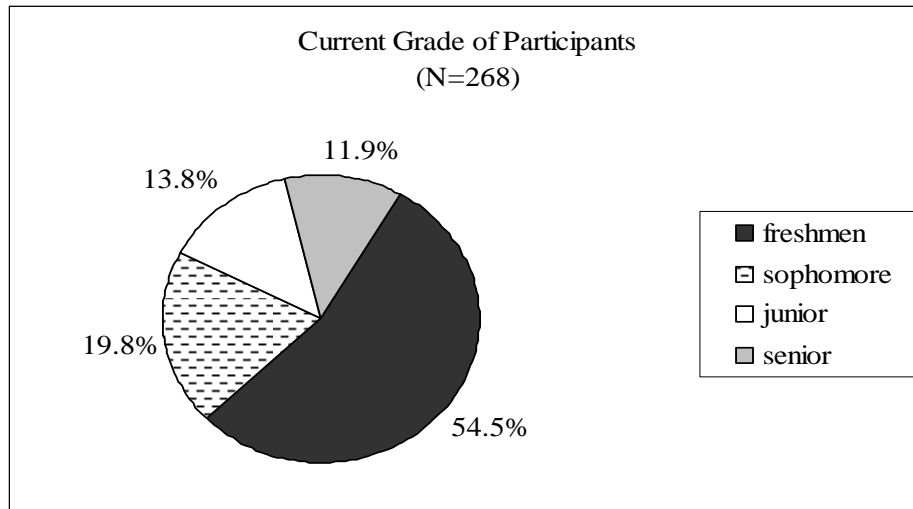


Figure 1. Current grade in school of students who participated in the ethics curriculum.

There were 150 (56.0%) male participants and 118 (44.0%) female participants. Results from a repeated measures analysis showed that both males and females improved their test scores from the pre-test to the post-test, but there was no significant difference between the two groups.

The mean number of years enrolled in 4-H for those participants who had at least one year of 4-H enrollment (N = 115) was 5.03 years. The mean number of years of FFA membership for those students who had at least one year of FFA enrollment (N = 135) was 1.79 years. Participants who had previously been enrolled in 4-H or FFA had higher scores, $F(1, 266) = 62.4, p < .001$, than those who had not been previously enrolled in 4-H or FFA. Although there was a difference in scores between groups, the amount of change over time was similar for the two groups.

Those individuals who had previously been enrolled in an animal project had higher scores, $F(1, 266) = 44.7, p < .001$, than those who had not been previously

enrolled in an animal project. Although there was a difference in scores between groups, the amount of change over time was similar for the two groups.

The mean pre-test score for the 268 subjects in this study was 17.82 correct answers out of a possible 29 questions (61.45%) with a standard deviation of 3.5. Scores ranged from 6 to 25 correct answers. The post-test mean score for the 268 subjects was 21.07 correct answers out of a possible 29 (72.66%), with a standard deviation of 3.6. Scores ranged from 8 to 27 correct answers. Figure 2 shows the distribution of pre-test and post-test scores of all participants. The results indicate an 18 percent gain ($t = 18.583, p < 0.05$) in student knowledge of livestock ethics as a result of the curriculum, which is 3.25 correct responses. Eighty-six percent of participants improved their score from the pre-test to the post-test. Figure 3 shows the net knowledge gain (loss) distribution for all participants, which resembles a “bell-shape”, consistent with a “normal” distribution.

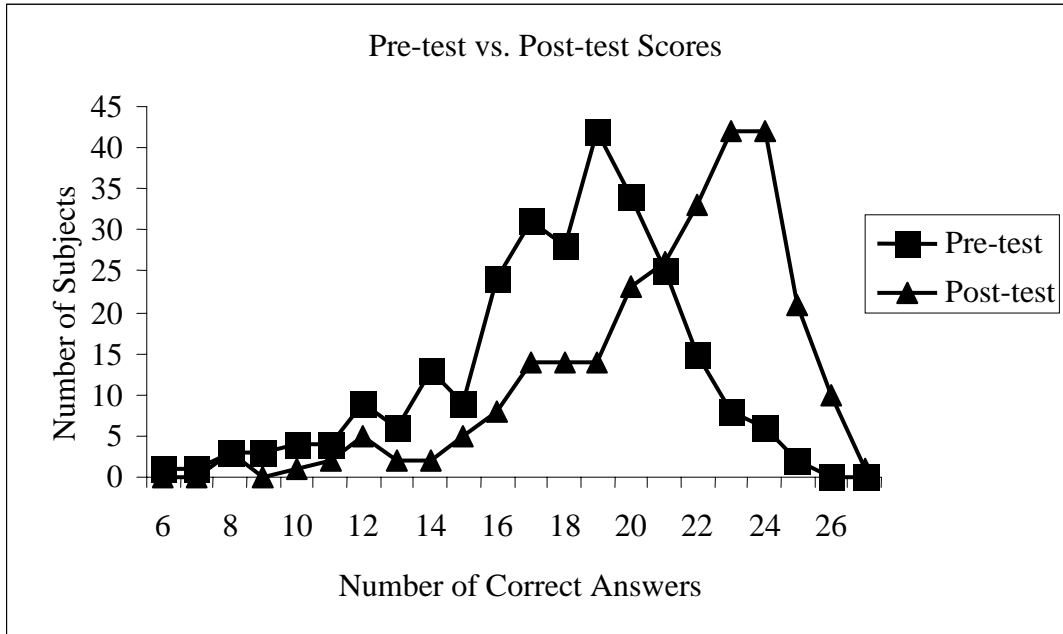


Figure 2. Distribution of the number of correct answers on the pre-test and post-test.

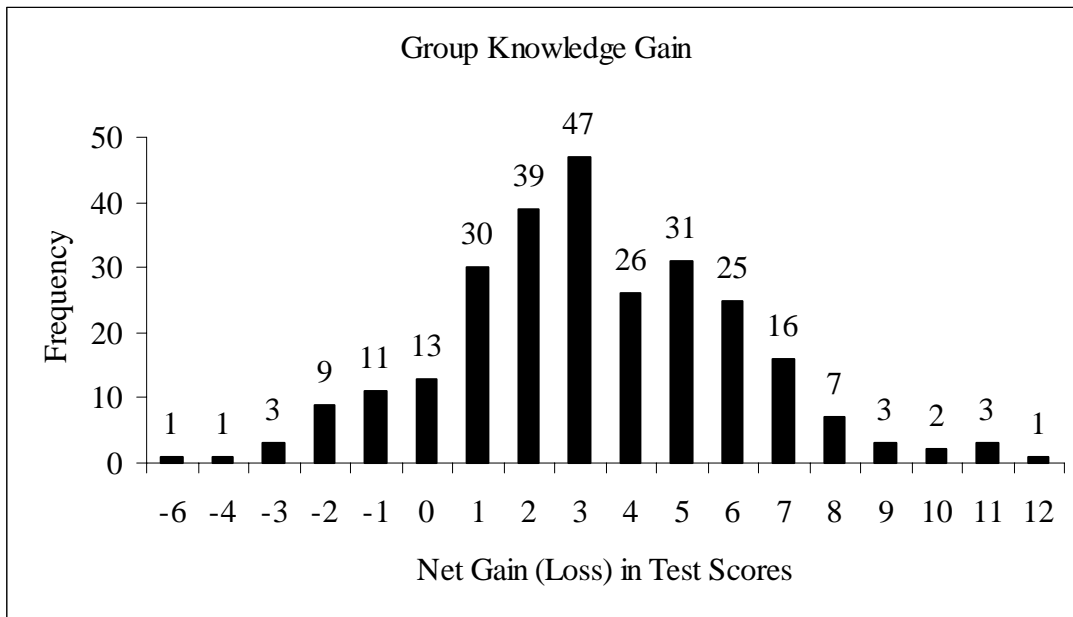


Figure 3. Distribution of knowledge gained as a result of the ethics curriculum.

From the pre-test to the post-test, significantly ($p < .001$) more participants were able to list an unethical practice involving livestock. Prior to instruction, 41.6 percent of the participants were able to identify at least one example of an unethical practice related to the youth livestock program. Following instruction, 93.6 percent were able to list an unethical practice involving the youth livestock program.

As noted in Table 1, there was an improvement in the number of correct answers from the pre-test to the post-test on all but one of the eight livestock related situations that participants were asked to

identify as either ethical or unethical. The following situation: "Hiring a professional groomer to prepare your animal the day of the show while you stand back and watch," resulted in a significant decrease from pre to post-test in the students' ability to correctly identify whether this practice was ethical or unethical. Participants showed the most improvement (30.8 percent) from pre to post-test in their ability to correctly identify, "Spray painting the hooves black on an Angus steer..." as an ethical practice. Even after completing the ethics curriculum, however, 46.6 percent of participants thought the practice was unethical.

Table 1

Percent of correct answers by participants on statements used to identify ethical or unethical situations.

Question	Pre-test	Post-test	P-value
1. Hiring a professional groomer to prepare your animal the day of the show while you stand back and watch. (U)	80.9	68.9	<.001
2. Walking your calves thirty minutes each day to prepare them for show day. (E)	92.2	97.0	<.05
3. Spray-painting the hooves black on an Angus steer. (E)	22.6	53.4	<.001
4. Using a water hose to fill up your barrow in order to make the minimum weight requirement. (U)	86.2	93.3	<.001
5. Withholding feed and water from your pig two days before the show in order to meet the maximum weight requirement. (U)	89.6	93.3	>.05
6. Teaching your lamb to stand firmly at a young age in order for it to perform better during showmanship. (E)	91.8	97.4	<.001
7. Rubbing mud on ringworm spots on a lamb before it goes through the health inspection at the fair. (U)	94.4	96.6	>.05
8. Washing a cow to give her a shiny appearance on show day. (E)	96.3	99.6	<.01

Note: E = ethical practice, U = unethical practice.

One section of the test gave students the opportunity to evaluate a case scenario and answer five questions that were used to determine whether students could make ethical choices when faced with specific situations. The results of the McNemar test shown in Table 2, reveal an improvement

($p < .001$), from the pre-test to the post-test, in students' ability to answer all but one of the questions. Most participants (97.8 percent) were able to correctly identify "who was involved in the situation" on the pre-test, which left little room for improvement on this question going to the post-test.

Table 2

Percent of students able to correctly evaluate the livestock ethics scenario.

Question	Pre-test	Post-test	P-value
1. Who is involved in the situation?	97.8	98.5	>.05
2. What decisions are being made in the above scenario?	82.7	94.2	<.001
3. What are the ethical aspects of the above case?	69.8	89.8	<.001
4. What are the unethical aspects of the above case?	76.2	88.5	<.001
5. What should Peggy ^a do?	77.9	90.8	<.001

^a Peggy was a fictional character in the scenario.

Conclusions/Implications/ Recommendations

In summary, the students who were taught the livestock ethics curriculum: had a better understanding of the ethics associated with the youth livestock program, were more aware of the principles involved in making ethical choices when faced with decisions, and had a better understanding of the consequences of an unethical choice. Participants in this study are more likely to make an ethical choice when faced with a decision in the youth livestock program, than they were prior to receiving the ethics curriculum. The results do not imply that students will make the right decision in a real-life setting. The researchers recommend additional research on this curriculum to include measures of learning decay as measured by a delayed post test and the addition of a control group to test between subject differences.

The first objective of this curriculum was to increase participants' awareness of the principles involved in making ethical choices when faced with decisions in youth livestock programs. The overall evaluation of the pre-test and post-test indicates

participants increased their awareness and knowledge of the overall principles involved in making ethical choices by 18 percent on the post-test verses the pre-test. A majority (eighty-six percent) of participants improved their score from the pre-test to the post-test. These results show that most high school-aged students are capable of learning how to make ethical choices. With the reported rise in cheating, stealing, and lying over the last ten years among high school students (Josephson Institute of Ethics, 2002), there is obviously a need for ethics education at the high school level; and maybe even earlier. Further research is warranted to determine if an ethics curriculum can be developed and implemented in high school classrooms and/or in after school programs. Longitudinal studies are also needed to determine whether or not teaching an ethics curriculum can make a long term change in student behaviors and improve their ability to make ethical choices.

The second objective was to determine whether a livestock ethics curriculum helped students determine whether certain practices at a youth livestock show are ethical or unethical? After receiving the ethics curriculum, 52 percent more participants

were able to list an unethical practice associated with the youth livestock program. While this number is strong, it implies that future revision of the curriculum should include additional examples of unethical practices. By applying Goodwin's four "ethical compass" questions (1: Does the practice violate FDA law? 2: Does the practice harm the animal? 3: Does the practice fraudulently misrepresent the animal? 4: Does the practice have anything to do with real-world Agriculture?), participants were better able to determine whether 7 of the 8 situations were ethical or unethical.

There was a significant decrease from the pre-test to the post-test scores in student's ability to determine if the following situation was ethical or unethical: "Hiring a professional groomer to prepare your animal the day of the show while you stand back and watch." In hind sight, the researcher did not provided sufficient detail during instruction of the curriculum for students to recognize this practice as unethical.

Students in mainstream America might benefit from an "ethical compass" similar to the one Goodwin developed for livestock practices. A statement or set of questions that students could use to determine whether a decision, they are about to make, is ethical or unethical; could be very helpful. In the meantime, teaching students to follow the "golden rule", "Do unto others as you would have them do unto you", will help direct youth down the ethical path.

The third objective of the study was to identify whether participants would make ethical choices when faced with decisions in youth livestock programs as demonstrated by real life case study analysis. After analyzing several case scenarios in the livestock ethics curriculum, students were better able to: (1) identify the decisions being made; (2) determine which aspects of the scenario were ethical and which were unethical; and (3) make an ethical choice when asked to decide what the character in the scenario should do. The results from this portion of the study indicate that students can learn to make ethical choices in case scenarios. However, there is no guarantee that participants will actually

make an ethical choice when faced with a real-life situation. Further research needs to be done to determine whether the participants from this study really do make ethical choices when they are given an opportunity to apply the skills they learned from this ethics curriculum.

The final objective of the study was to determine if demographics such as: current grade in school, gender, years enrolled in 4-H, years enrolled in FFA, years enrolled in beef, swine, sheep, horse, dairy, and other livestock projects, or previous participation in a livestock ethics curriculum; help explain the difference in pre and post-test scores amongst participants. Once analyzed, past enrollment in 4-H or FFA, past enrollment in an animal project, and the ability to list an unethical practice resulted in higher pre and post-test scores than those who had no previous enrollment. The remainder of the demographic questions had no effect on the results of the current study.

Twenty-one of the 268 students stated they had been through a previous ethics training program. The researcher expected those who had been through previous livestock ethics training to score higher on the pre and post-test than those individuals who did not have previous ethics training. However, there was no difference in the pre and post-test scores of these students. These results could be due to the low number of participants who had been through previous ethics training, or possibly due to participants not having an opportunity to apply the knowledge they learned from previous ethics training. If the knowledge was not applied, students may have forgotten the principles involved in making ethical choices.

References

- Comstock, G. L. (Ed.). (2002). *Life science ethics*. Ames, IA: Blackwell.
- Fetsch, R. J., & Yang, R. K. (2002). The effect of competitive and cooperative learning preferences on children's self-perceptions: A comparison of 4-H and non-4-H members. *Journal of Extension*, 40(3). Retrieved July 29, 2003 from: <http://www.joe.org/joe/2002june/a5.html>

Goodwin, J. L. (Producer). (1996). *The Line in the Sand* [Motion picture]. (Available from Texas A&M University, Mail Stop 2588, College Station, TX 77843-2588)

Goodwin, J. L., Briers, G., & Murphy, T. H. (2002). Measuring the ethical cognition effects of a videotape livestock show ethics education program. *Journal of Extension*, 40(6).

Johnson, K. N. (1995, December). *Ethics and youth in expositions and competitions*. Paper presented at the LCI National Youth Livestock Program Ethics Symposium.

Josephson Institute of Ethics. (2002). *Report card 2002: The ethics of American youth*. Los Angeles, CA: Author.

Josephson, M. (2002). *Making ethical decisions*. Marina del Ray, CA: Josephson Institute of Ethics.

Keith, L., & Vaughn, P. (1998). The value of 4-H competitive activities as perceived by the parents of 4-H members. *Journal of Agricultural Education*, 39(3), 41-50.

Kohlberg, L. (1969). Stage and sequence: The cognitive-developmental approach to socialization. In D. A. Golsin (Ed.), *Handbook of socialization theory and research* (pp. 347-480). Chicago: Rand McNally.

Moser, L. (2003, November). Ohio livestock tampering law may set the framework for other states. *Hoard's Dairyman*.

Mounce, A. R., Terry, R., Jr. (2001, January). *Students' perceptions of unethical practices in FFA competitions*. Paper

presented at Southern Agriculture Education Conference, Fort Worth, TX. Retrieved January 22, 2003, from: <http://aaaeonline.ifas.ufl.edu/Research%20Conferences/Saerc/2001/pdf/a3.pdf>

Rollin, B. E. (1995). *The ethics of livestock showing*. Paper presented at the LCI National Youth Livestock Program Ethics Symposium.

Rus, D. G. (1997). *Evaluation of ethics perceptions in FFA members*. Unpublished master's thesis, Colorado State University, Fort Collins.

Rusk, C. P., & Machtmes, K. L. (2003). Livestock ethics: A curriculum for teachers. *Journal of Extension*. 40(3).

SPSS Version 11.5 for Windows [Computer Software]. (2000). Chicago, IL: SPSS.

Taylor, L., Pogrebin, M., & Dodge, M. (2002). Advanced placement, advanced pressures: Academic dishonesty among elite high school students [Electronic version]. *Educational Studies*, 33 (4), 403-421.

Tomlinson, (1996). Constructing case studies for ethics teaching. *The Ag Bioethics Forum*, 8(2).

Trevino, L. K. (1986). Ethical decision making in organizations: A person-situation interactionist model. *The Academy of Management Review*, 11(03), 601-617.

Wills, C. (2003, August 13). Illinois State Fair disqualifies teenager, champion steer for using banned drug. Retrieved August 21, 2003, from: <http://edition.cnn.com/2003/US/Midwest/08/13/offbeat.steer.sandal.ap/>

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