

## Perceptions of Texas 4-H Livestock Ambassadors on Career Development, Higher Education, and Leadership Development

### Abstract

Selected 4-H youth participated in the Texas 4-H Livestock Ambassador program. Forty-five youth participated in the 3-day program delivered by university professors and staff, Texas AgriLife Extension faculty and industry representatives. An instrument was developed and administered to the Texas 4-H Livestock Ambassadors at the end of their first year of service to evaluate their perceptions regarding the perceived impacts the program had on: 1) career goals, 2) higher education opportunities, and 3) leadership development. The students perceived the Texas 4-H Livestock Ambassador Program increased their understanding of career development, higher education, and leadership development.

**William F. Zanolini**  
Extension 4-H and  
Youth Development  
Specialist  
Texas A&M AgriLife  
Extension  
College Station, Texas  
[wfzanolini@ag.tamu.edu](mailto:wfzanolini@ag.tamu.edu)

**John Rayfield**  
Assistant Professor  
Department of  
Agricultural  
Leadership, Education  
and Communications  
Texas A&M University  
College Station, Texas  
[jrayfield@tamu.edu](mailto:jrayfield@tamu.edu)

**Jeff Ripley**  
Assistant  
Professor/Extension  
Specialist  
Department of  
Agricultural  
Leadership, Education  
and Communications  
Texas A&M University  
College Station, Texas  
[jripley@tamu.edu](mailto:jripley@tamu.edu)

## Introduction

Through the years, the 4-H program has flourished into the largest youth program in the United States, boasting more than six million youth (National 4-H, 2011). It has been well documented that the 4-H program has a rich history of teaching youth life skills and character education. The 4-H Study of Positive Youth Development (2002) surveyed more than 7,000 adolescents from diverse backgrounds across 44 states. The study found that, when compared to other youth, young people involved in 4-H have higher educational achievement and motivation for future education. Similarly, the study reported here analyzed Texas 4-H Livestock Ambassadors perceptions of career goals, higher education opportunities, and leadership development during their yearlong experience as 4-H Livestock Ambassadors. By analyzing perceptions of 4-H youth, future programmatic efforts in Extension may focus on career and leadership development while engaging students in higher education settings.

According to Texas 4-H (2011), the mission of the organization is to: "Prepare youth to meet the

challenges of childhood, adolescence and adulthood, through a coordinated, long-term, progressive series of educational experiences that enhance life skills and develop social, emotional, physical and cognitive competencies." The Texas 4-H Livestock Ambassador Program epitomizes the organizations mission statement and relies heavily on building content knowledge of students. Application of the concepts presented in the curriculum to new experiences helps students build connections between what is learned and what can be practically applied.

The Texas 4-H Livestock Ambassador Program is an in-depth learning experience for the youth who are selected to represent the agricultural industry in the state. The program uses a criterion-based method to select the students that who applied to be in the program. The criteria are: senior aged (14-18) 4-H youth who have exhibited a superior level of ambition regarding their livestock project participation, students with a profound interest in animal science, students with an exceptional grade point average, and students who exhibit advanced leadership qualities and willingness to help others. The applicants must also have the approval of their county Extension agent.

The training takes place on the campuses of two major universities with colleges of agriculture and life sciences. During the 3-day training, more than 20 hours of instruction by university faculty, Extension specialists, and county Extension agents cover topics such as college level animal science principles, leadership, career development, higher education opportunities, and animal agriculture advocacy. Upon completion of the program, 4-H Livestock Ambassadors are required to commit at least 30 hours of service annually; in most cases the service goes back to assisting novice 4-H families with their livestock projects and education. Ambassadors conduct and assist with educational livestock project clinics, conduct home project visits, speak to civic groups, assist with livestock shows, speak at agricultural awareness days, and advocate for the livestock and agriculture industry. Ambassadors report monthly to an on-line reporting system their accomplishments and highlights from their experiences.

The Texas 4-H Livestock Ambassador Program was created to equip youth with the knowledge and skills to become and serve as ambassadors for animal agriculture through Extension and the Texas 4-H Program. The program is designed for motivated youth desiring to enhance their knowledge of livestock and agriculture, as well as share their gained knowledge with others. Rusk and Machtmes (2002) reported that 78% of the youth participating in a similar program in Indiana were motivated to share the information learned with others in their community. Similarly, 4-H Livestock Ambassadors are gaining knowledge of career development, higher education, and leadership development that may translate into shared knowledge with other youth livestock participants and their parents.

## **Purpose and Objectives**

The purpose of the study reported here was to evaluate the perceptions of Texas 4-H Livestock Ambassadors on career development, higher education, and youth leadership development after 1 year of service in the Texas 4-H Livestock Ambassador Program. Specifically, the objectives of the study were to:

1. Determine if the Texas 4-H Livestock Ambassador Program enhanced perceptions of career development in agriculture.

2. Determine if the Texas 4-H Livestock Ambassador Program changed the students' perceptions of higher education.
3. Describe the students' perceptions of leadership development in the 4-H Livestock Ambassador Program.

## Methods/Procedures

The census study used an on-line survey that was distributed to the Texas 4-H Livestock Ambassadors at the end of their year of service to investigate students' progress as well as perceptions of their overall experience. The survey used a five-point summated scale with responses ranging from "Strongly Disagree =1, Disagree =2, Neutral =3, Agree =4, and Strongly Agree =5". A panel of experts composed of university faculty and Extension specialists reviewed the instrument for content and face validity. The instrument was divided into three constructs: 1) career goals, 2) higher education, and 3) leadership.

A pilot test was conducted on 4-H livestock exhibitors at the [City] Livestock Show and Rodeo. These 4-H members were not participants in the Texas 4-H Livestock Ambassador Program. Participants who completed the pilot test instrument met the following criteria: 1) Member of Texas 4-H, 2) Exhibiting specie of livestock used in selection criteria for ambassadors, and 3) Age 14-18. Thirty students completed the pilot instrument. Cronbach's alpha was used to test the reliability of instrument and was calculated to be  $\alpha = .93$ . No adjustments were made to instrument based on the reliability analysis.

A pre-notice email was sent to alert the ambassadors that they would be receiving an online survey. The online survey was emailed to the 2010-2011 Texas 4-H Livestock Ambassador class. The ambassadors were instructed to complete the survey in 1 week. Two follow up emails were sent thanking those who had completed the survey. Forty-three of 45 ambassadors completed the online survey for an overall response rate of 96%.

After completion of the program, students are required to contribute 30 hours to their community through continued education opportunities, assisting 4-H families, and online conferencing. The 4-H Livestock Ambassador staff remains in contact with ambassadors to provide guidance and track progress through an online reporting system. Perceptions of the livestock ambassadors were collected after their first year of service to allow adequate time to reflect on the experience and to connect those experiences to career goals, higher education, and leadership development.

## Findings

The objective of the survey was to determine the perceived impact of serving as a Texas 4-H Livestock Ambassador with regard to career goal development, leadership development, and understanding of higher education. Tables 1-3 display the three items receiving the highest levels of agreement and the three items receiving the lowest level of agreement. Table 1 displays the means and standard deviations regarding the statements listed.

**Table 1.**

## Texas 4-H Livestock Ambassador's Perceptions of Career Goals

<b>Career</b>	<b>Mean</b>	<b>SD</b>
Highest level of agreement I have met people that will help me in my career.	4.80	.44
Even if I don't choose a career in animal agriculture, I will use skills gained in the program.	4.73	.45
My experiences in the program will benefit me in agriculture or any other career. Lowest level of agreement	4.73	.45
I am more aware of the diverse career opportunities in animal agriculture.	4.46	.60
I have met faculty members that will assist me in my career.	4.45	.67
4-H will produce more qualified future leaders in Agriculture.	4.37	.45
<i>Note.</i> Scale 1=Strongly Disagree, 2=Disagree, 3=Neither Agree or Disagree, 4=Agree, 5=Strongly Agree		

Table 2 contains the responses to the statements regarding the students' perceptions of higher education. The statement that produced the highest level of agreement based on mean scores was: The program allowed me to meet with university professionals and make valuable contacts for the future (m =4.73). The statement that produced the lowest level agreement was the statement: I thought the higher education component of the program was overrated and we could have learned the same stuff in my county (m=1.78).

**Table 2.**

## Texas 4-H Livestock Ambassador's Perceptions of Higher Education

<b>Higher Education</b>	<b>Mean</b>	<b>SD</b>
Highest level of agreement The program allowed me to meet with university professionals and make valuable contacts for the future.	4.73	.45
I felt privileged to be on a university campus and have the preview of what it will be like.	4.65	.59

I realize that other 4-H members not in the Texas 4-H Livestock Ambassador Program do not have the same opportunities as I have had to meet university professors and staff.  Lowest level of agreement	4.62	.59
I feel that the university wants me to attend their university because I was part of a unique group of 4-Her's.	3.84	.80
This was the first time that 4-H has made a real effort to prepare me for college.	3.19	1.37
I thought the higher education component of the program was overrated and we could have learned the same stuff in my county.	1.78	1.25
<i>Note.</i> Scale 1=Strongly Disagree, 2=Disagree, 3=Neither Agree or Disagree, 4=Agree, 5=Strongly Agree		

Table 3 contains the statements and responses related to leadership development. The statement with the highest level of agreement was: The program has challenged me to become a better leader ( $m = 4.78$ ). In contrast, the statement with the lowest level of agreement was: I do not feel that the novice 4-H youth look up to me ( $m = 1.78$ ).

**Table 3.**

Texas 4-H Livestock Ambassadors Perceptions of Leadership (N = 43)

<b>Leadership</b>	<b>Mean</b>	<b>SD</b>
Highest level of agreement  The program has challenged me to become a better leader.	4.78	.42
I will continue to use leadership skills gained in the program past my time in 4-H.	4.75	.44
I have great pride that 4-H trusts me to be a leader and mentor to novice youth with livestock projects.  Lowest level of agreement	4.72	.45
Teen leaders are good at teaching showmanship but should leave the feeding, health, and selection to the adults.	2.22	1.21

Teens are not qualified to teach novice youth.	1.84	1.42
I do not feel that the novice 4-H youth look up to me.	1.78	.93
<i>Note.</i> Scale 1=Strongly Disagree, 2=Disagree, 3=Neither Agree or Disagree, 4=Agree, 5=Strongly Agree		

## Conclusions

Texas 4-H Livestock Ambassadors reported that through the 4-H Livestock Ambassador Program they had met people who will help them in their career ( $m = 4.80$ ). Ambassadors stated even if they don't choose a career in agriculture, they will use the skills gained from the program ( $m = 4.73$ ). They were also energized to consider a career in animal agriculture ( $m = 4.68$ ) and to use their experience as a 4-H Livestock Ambassador to pursue future careers ( $m = 4.68$ ). These findings substantiate the work of Matulis, Hedges, Barrick, and Smith (1988) and Boleman, Merten, and Hall (2008), who found that 4-H contributed to career awareness and influenced career goals.

Rockwell, Stohler, and Rudman (1984) found that 4-H activities were influential on higher education choices and college majors in former Nebraska 4-H members. Similarly, 4-H Livestock Ambassadors reported that the program had allowed them to meet university professionals who would be valuable contacts ( $m = 4.73$ ), that they felt privileged to be on a university campus ( $m = 4.65$ ), and that other 4-H members who are not 4-H Livestock Ambassadors do not have the same opportunities as they did to meet university professors and staff ( $m = 4.62$ ). The 4-H Livestock Ambassadors disagreed that the higher education component of the program was overrated and could have been learned in the county 4-H program ( $m = 1.78$ ).

It has been well documented that 4-H develops young leaders. Mueller (1989), Seevers and Dormody (1995) point to leadership life skills development through a plethora of 4-H activities. The 4-H Livestock Ambassadors in the study reported here perceived that the program challenged them to become better leaders ( $m = 4.78$ ). They also believed that they will continue to use leadership skills gained in 4-H past their time in 4-H ( $m = 4.75$ ) and take pride that 4-H trusts them to be leaders and mentors to novice youth with livestock projects ( $m = 4.72$ ). The 4-H Livestock Ambassadors disagreed with the notion that discussions with elected officials should be limited to adults ( $m = 2.22$ ) and believed their expertise with livestock projects went beyond just showmanship into feeding, health, and selection of livestock projects (2.22). The ambassadors strongly opposed the position that teens were not qualified to teach novice adults ( $m = 1.84$ ) and the statement "I do not feel that novice 4-H youth look up to me ( $m = 1.78$ )."

## Implications and Recommendations

The implications of the study reported here could influence the future direction of 4-H as well as Extension. Previous studies (Mueller, 1989; Rusk & Machtmes, 2002; Seevers & Dormody, 1995) all point to 4-H experiences as being key to many career, leadership, and life skills development opportunities. In order to sustain and expand opportunities for youth to participate in such programs, Colleges of Agriculture and Extension should explore ways to partner with stakeholders to

develop, implement, and evaluate innovative programs that foster career and leadership development of 4-H members. Land-grant universities tout the power of the land-grant system (teaching, research, and Extension); therefore, these institutions should have a keen interest in youth who show interest and aptitude in all fields of agriculture.

Participants in the study perceived knowledge was gained in career development, understanding of higher education, and leadership development. Future research should focus on the parents or guardians of the Texas 4-H Livestock Ambassador Programs and compare the perceptions of the students juxtaposed to those of the parents or guardians. A longitudinal study should be conducted to follow up with ambassadors 5 years following graduation. Participants should be evaluated on long-term life skills developed, career choice, career development, and educational choice as a result of the Livestock Ambassador Program.

The Texas 4-H Livestock Ambassador Program itself should be replicated in other states and not only in the context of livestock. Perhaps leadership development, community development, or sustainable agriculture could all benefit from a youth ambassador program. Efforts should be made to evaluate similar 4-H programs and other youth development organizations to validate their necessity and viability in future programming efforts.

Recently, Texas Extension implemented a reduction in force due to state appropriated budget cuts. The reduction in force was felt by county Extension agents across the state. Many of the positions eliminated were positions that had 4-H responsibilities. Therefore, Texas Extension was faced with the hardship of serving the same number of clientele while having reduced faculty to meet needs of 4-H families in the communities. Based on the findings of the study reported here, a competent volunteer base to execute the Extension mission has been created. Is this a model for training the future workforce and leadership in the Extension organization? Time will tell.

## References

- Boleman, C. T., Merten, K., & Hall, G. W. (2008). State 4-H Council: A look back at what it meant to serve. *Journal of Extension* [On-line], 46(1) Article 1RIB5. Available at: <http://www.joe.org/joe/2008february/rb5.php>
- Matulis, J.K., Hedges, L.E., Barrick, K., & Smith, K.L. (1988). 4-H strikes a positive note. *Journal of Extension* [On-line], 26(1) Article 1FEA5. Available at: <http://www.joe.org/joe/1988spring/a5.php>
- Mueller, D. (1989). Taking the lead in leadership. Unpublished master's thesis, Washington State University, Pullman.
- National 4-H (2011). *Who are we?* Retrieved from: <http://www.4-h.org/about/youth-development-organization/>
- Rockwell, S. K., Stohler, R. F., & Rudman, L. F. (1984). How 4-H helps career development. *Journal of Extension* [On-line], 22(3) Article 3FEA1. Available at: <http://www.joe.org/joe/1984may/a1.php>
- Rusk, C. P., & Machtmes, K. L. (2002). Teaching youth through 4-H animal science workshops. *Journal of Extension* [On-line], 40(5) Article 5IAW7. Available at:

<http://www.joe.org/joe/2002october/iw7.php>

Seevers, B. S., & Dormody, T. J. (1995). Leadership Life skills Development: Perceptions of Senior 4-H Youth, *Journal of Extension* [On-line], 33(4) Article 4RIB1. Available at:

<http://www.joe.org/joe/1995august/rb1.php>

Texas 4-H. (2011). Texas 4-H and Youth Development. Retrieved from: <http://Texas4-h.tamu.edu/about/index.php>

The 4-H Study of Positive Youth Development. (2002). Retrieved from: <http://www.4-h.org/about/youth-development-research/>

---

*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](mailto:joe-ed@joe.org).

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