



## Measuring Life Skill Development in the Colorado 4-H Program

### *The Situation*

The benefits of 4-H programs in Colorado have historically been communicated through anecdotes and success stories. These typically reflected the quality of the programs through the gut feelings of those familiar with the program, but did not demonstrate the public value of the youth development program in quantifiable measures.

The purpose of this study was to gather and provide sound, research-based information to the public about the effect 4-H membership has on the lives of young people.

### *Our Response*

In the summer of 2008, data were collected related to life skill development of Colorado 4-H members in organized 4-H clubs. There were 1,843 surveys collected. Surveys were administered at county fairs and regular 4-H club meetings. There was no random assignment of counties involved in the data collection. Instead, 30 counties collected and submitted data on a voluntary basis.

The life skills measured were:

1. record keeping
2. community service
3. leadership
4. public speaking
5. decision making
6. problem solving

Demographic data collected were:

1. Years in 4-H
2. Age
3. Grade in school
4. Gender

Responses to the six life skill-related questions were reported on a four-point Lickert scale of:

1. Yes – Always
2. Usually
3. Not Often
4. No – Never

Open-ended comments about their 4-H experience were also collected from those 4-H members who voluntarily provided that information.

### *How We Did It*

A Chi Square statistical analysis was conducted comparing those new to 4-H (junior 4-H members, ages 8-11) with more experienced 4-H members (intermediate and senior 4-H members, ages 12-18). This comparison treated the less-experienced members as a quasi-control group.

## Outcomes

*The response to all six life skill-related questions was highly significantly different ( $P < .01$ ) between the less experienced 4-H members and the more experienced members. This difference was exhibited in a positive relationship for all six life skills.*

*The major finding in the study: For all six life skills measured there was a highly significant difference between the responses of the more experienced 4-H members surveyed and the members with two years experience and less. This difference was in a positive relationship, meaning that the more experienced 4-H members scored higher on the scale than did less experienced members. This finding would suggest that 4-H members acquire proficiency in life skills as they participate in the 4-H program.*

If the responses to the raw life skill data for the first two choices on the scale—1) Yes-Always and 2) Usually—are combined to represent a positive response, the order and percentages of those positive responses are as follows:

1) decision making	98.2%
2) problem solving	97.6 %
3) community service	96.6%
4) record keeping	93%
5) public speaking	92.7%
6) leadership	75.3%

One observation of this listing is that all six life skills had a majority of positive responses from members. One also notes that five of the six life skills reported positive responses of 92 percent or better.

As for the life skill with the lowest positive response (leadership), it could be argued that leadership is a higher level life skill which takes a longer span of time to master. The following percentages support this hypothesis:

### Percent Positive Leadership Responses

• 1-2 years in 4-H	64.5%
• 3-4 years in 4-H	73.4%
• 5 years or more	88.4%

As you can see, the positive leadership score increases dramatically as involvement in 4-H increases.

Plans are being made to collect similar data in 2009 using the same sampling technique. The life skills to be measured in 2009 will be related to science, technology, engineering and math (STEM).

### County Partners

Data for this study were collected in the following Colorado counties:

Adams	Lincoln
Arapahoe	Logan
Baca	Mesa
Cheyenne	Montrose
Crowley	Morgan
Custer	Otero
Douglas	Ouray
Elbert	Park
El Paso	Phillips
Garfield	Prowers
Grand	Sedgwick
Huerfano	Summit
Kiowa	Washington
La Plata	Weld
Larimer	Yuma

### For more information, contact:

Jeff Goodwin, Assistant Director  
4-H & Youth Development  
Colorado State University  
(970) 491-1152  
[Jeff.Goodwin@Colostate.edu](mailto:Jeff.Goodwin@Colostate.edu)  
[www.colorado4h.org](http://www.colorado4h.org)

