Measuring Life Skill Development in the Larimer County 4-H Program

**Situation**

Benefits of the 4-H program in Colorado have historically been communicated through anecdotal evidence and personal success stories. These typically reflected the quality of the programs through the gut feelings of those familiar with 4-H, 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.

**Extension’s Response**

In the summer of 2010, data were collected related to life skill development of Larimer County 4-H members in organized 4-H clubs. There were 90 surveys collected. Surveys were administered at the county fair and regular 4-H club meetings.

The life skills measured were:

1. Working out problems
2. Using resources wisely
3. Planning a project
4. Making good decisions
5. Using project tools
6. Using technology
7. Following instructions

Demographic data collected were:

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

Responses to the seven life-skill-related questions were reported on a four-point Likert 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.

**The Bottom Line**

- Larimer County has the largest 4-H club program in Colorado with 1,071 4-H members and 427 adult volunteer leaders.
- Each year more than 60 educational project workshops are made available to 4-H members, leaders and parents.
- 42 Larimer County youth have been 4-H members for more than 10 years.
Results

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.

There was a significant positive difference between pre-and post-scores when all the data were analyzed separately and also when grouped together as one experimental treatment group. Results of the pre- and post-responses are shown on the following graph.

![Graph showing mean responses for all questions with significant differences marked.]

While all mean responses show a significant difference between pre- and post-measures, the two questions with the greatest change between pre- and post-mean scores were Q3 – Planning a Project, and Q5 – Using Project Tools.

<table>
<thead>
<tr>
<th>Change in Mean Scores Pre- and Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 Work Out Problems</td>
</tr>
<tr>
<td>Q2 Use Resources Wisely</td>
</tr>
<tr>
<td>Q3 Plan a Project</td>
</tr>
<tr>
<td>Q4 Make Good Decisions</td>
</tr>
<tr>
<td>Q5 Use Project Tools</td>
</tr>
<tr>
<td>Q6 Use Technology</td>
</tr>
<tr>
<td>Q7 Follow Instructions</td>
</tr>
</tbody>
</table>

A statistical analysis was conducted on the responses of 90 Larimer County 4-H members. The seven questions that 4-H members responded to were retrospective life-skill-based questions gained in their 4-H experience. Members were asked to respond to those questions as they would have prior to their 4-H experience and after their 4-H experience.

“I’ve become a better listener, a better follower and a better leader. It’s helped me find some of my character.”

“I have gotten experience in working through mostly self-initiated long term projects, a skill that has been useful in high school. I have also gotten to explore many creative possibilities.”

“4-H has made me a more responsible person. It has made me more independent and has made me start solving problems by myself. 4-H has made me open up to new ideas and assistance.”

“4-H has taught me lessons that I can take with me for the rest of my life. I’ve learned leadership, cooperation, time management, communication, responsibility, the list goes on and on. Without 4-H I don’t know how I would have attained these skills.”

-All comments from Larimer County 4-H Members

4-H is a community of young people across Colorado learning leadership, citizenship, and life skills. One hundred years of research-based programs and experience bear significant results. Research shows that youth involved in 4-H are more likely to develop the “five Cs” (competence, confidence, character, caring and connection). Through participation in 4-H programs, youth are more likely to be at the highest level of contribution in their communities.

Colorado State University Extension, U.S. Department of Agriculture and Colorado counties cooperating. Extension programs are available to all without discrimination. September 2011.