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2018 Nevada 4-H Annual Survey Summary Report

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Introduction

The Nevada 4-H Evaluation and Accountability Working Group convened in 2016 with the goal of developing and administering an annual survey to Nevada 4-H members that would measure the impact of 4-H on participants and create yearly baseline data for the statewide 4-H Program (Usinger, et al., 2014). The survey results contained in this fact sheet may gain public support, because they demonstrate the public value of 4-H in quantifiable measures (Goodwin, 2007). In 2018, Nevada 4-H received a grant to pilot the newly revised 4-H Common Measures 2.0 survey instruments from National 4-H Council. The purpose of the 4-H Common Measures Survey is to identify youth outcomes and indicators to improve programs; ensure youth outcomes are met; collect consistent, annual statewide data for reporting needs and gap assessment, and multi-year trend analysis; justify investment in youth programming; increase program awareness and marketing; and assist with statewide 4-H strategic planning (National 4-H Council, 2017). This grant provided support to launch the inaugural Nevada 4-H Annual Survey in late 2018.

Since 1939, Nevada 4-H youth and teens (ages 9-19) have been participating in hands-on projects in health, science, agriculture and civic engagement in a positive environment where they receive guidance from adult volunteers and are encouraged to take on leadership roles. 4-H youth development programs are offered in all 17 Nevada counties, and 49,000 are enrolled.

Survey Instrument and Administration

Two survey frames were developed: a shorter version for younger youth in grades four through seven, and a longer one for older youth in grades eight through 12. Youth in grades four through seven received roughly half of the survey developed for older youth, comprised of questions prescreened for use with younger participants.

The Nevada 4-H Annual Survey used the 4-H Common Measures 2.0, 4-H Experience Survey and Universal Survey, including nine demographic items (National 4-H Council, 2017). All surveys used in the study included 15 4-H Experience items. Older youth were asked an additional 15 Universal items. Additional items added by the Nevada 4-H Evaluation and Assessment Working Group included asking if youth participants had a relative in the military, in which Nevada county they participated in 4-H, and older youth were asked about plans after high school. The survey for younger youth consisted of 28 items, and the survey for older youth contained 53 items. Both the 4-H Experience and Universal items were measured using a four-point Likert scale (4 = yes; 3 = usually; 2 = not really; 1 = no). For this initial statewide survey administration, county 4-H staff collected responses from participating 4-H youth from Oct. 1, 2018 through Jan. 31, 2019.

The survey was made available to county 4-H staff in three formats: a web-based link, an electronic format loaded onto digital tablets, and paper and pencil format. The electronic formats were uploaded directly to the Qualtrics database, and

county staff entered the paper and pencil results into a spreadsheet for upload by the graduate

research assistant in the State 4-H Office. Responses by survey format are listed in Table 1.

Table 1: Completed surveys by response format

	Grades 4-7	Grades 8-12	Total
Web-based*	54	34	88
Tablet	51	56	107
Pencil and paper	50	32	82
Total	155	122	277

*Includes surveys taken directly by youth on a computer and those entered by staff on the Qualtrics website.

Results

Participants

Survey respondents were diverse in age (ranging from seven to 18, with 68% between 10 and 14) and gender (57% female), and largely were White (80%), non-Hispanic (89%) and without a parent in the military (86%). The majority (92%) of respondents had between one and five or more years of experience in 4-H, with 12% indicating 4 years and 23% reporting five or more years of participation in 4-H. Participants reported high involvement (85%) with 4-H at the county level. The highest involvement was with activities related to club engagement: clubs (74%), fairs (54%), community service (54%) and home project work (55%).

County Participation Rates

The committee designed the survey to be given to youth who were community club members or who had six hours or more of participation in 4-H activities. County staff were free to determine how best to reach the desired audience. The study purpose and supporting information were presented to Extension educators and 4-H staff in meetings

and email. The state 4-H program director developed an instruction sheet, encouraging staff to provide electronic tablets, paper and pencil, and internet through 4-HOnline emails, the 4-H enrollment database. Reminders were emailed three times and discussed at 4-H staff meetings. Counties had the option of using tablets, provided by the State 4-H Office. Complete participation rates are listed in Table 2. County club participation was used to measure rate of return because that was the primary target audience. Determining county participation was based on responses to the question, "In which county do you participate in 4-H?"

Nine counties were represented by at least four participants. Five counties had no participants, and two counties only had one participant each.

Other state 4-H programs that distribute similar statewide surveys report statewide response rates between 10 to 15%. By that standard, an overall response rate in Nevada of 6.9% is reasonable for this initial effort. Four counties surpassed the 10% standard, but the overall 4-H participation numbers of those four counties were relatively low.



Youth playing with a parachute. Girl handing out a 4-H water bottle.
Photos by Robert Moore, College of Agriculture, Biotechnology & Natural Resources.

Table 2: Completed surveys by county of participation

County	Grades 4-7 Surveys Returned	Grades 8-12 Surveys Returned	Total by County	2017-18 Club Membership	Returned
Carson City/Storey	4	9	13	130	10%
Churchill	0	1	1	383	0.3%
Clark (three offices)	21	13	34	879	3.9%
Douglas	44	22	66	703	9.4%
Elko	4	11	15	334	4.5%
Esmeralda	0	0	0	0	0
Eureka	0	0	0	13	0
Humboldt	29	34	63	234	26.9%
Lander	1	0	1	52	1.9%
Lincoln	8	2	10	195	5.1%
Lyon	0	0	0	143	0
Mineral	3	1	4	111	3.6%
Nye	0	0	0	196	0
Pershing	0	0	0	210	0
Washoe	20	14	34	252	13.5%
White Pine	20	15	35	198	17.7%
Unidentified County	1	0	1		
Totals	155	122	277	4033	6.9%

Program Impacts

Fifteen items in the survey formed the 4-H Experience scale, designed to measure participants on the eight essential elements of positive youth development (Kress, 2004). This scale had an excellent reliability score of .83, indicating that all the scale items align with the essential elements. The average mean of items in the scale was 3.54. The highest mean response ($M = 3.85$) was for "Is 4-H a place where adults care about you?" These results suggest that Nevada 4-H is a safe place for members and a place where they feel like they belong. Those feelings of belonging make it easier to focus on helping others and to pursue activities they enjoy. The question, "Is 4-H a place where you get to do things that you like?" ($M = 3.72$) indicates that 4-H members have opportunities to pursue interests and hobbies that create constructive learning experiences. Nevada 4-H youth indicated that they learn about ways to help their community ($M = 3.72$). The 4-H Pledge focuses on the importance of community service. When youth practice service in the community, they form bonds with members of their clubs and the community. The lowest mean response ($M = 2.48$) was for "Is 4-H a place where adults make the decisions?" This item suggests that adults in 4-H should consider letting youth choose activities and figure out more for themselves, and make fewer decisions for the youth. The scale results suggest that youth feel comfortable and safe in 4-H; therefore, youth can be given more opportunities to make their own decisions.

Twenty-three items comprised the 4-H Universal scale, designed to measure personal growth mindset and social skills necessary to be competent members of society (National 4-H Council, 2017). This scale was only given to youth in the eighth through 12th grades, and also had excellent reliability. The average mean of items in the scale was 3.48, with an average standard deviation of 0.25. The highest mean response ($M = 3.76$) was for "Do you try to learn from your mistakes?" This item and "Are you willing to work hard on something difficult?" ($M = 3.70$) suggest that youth are developing a healthy personal mindset necessary for school and workplace success. The lowest mean response ($M = 2.83$) was for "Do you have a hard time speaking in a

group?" This question was reverse-coded, and a low score was desirable, indicating that most youth answered "No" or "Not really." This suggests that 4-H offers youth opportunities to speak in front of their club, presenting demonstrations, leading meetings and discussing activities or club business. The complete list of 4-H Common Measures 2.0 items, their means, standard deviations, and number of responses can be found in Appendices A and B.

Additionally, we asked respondents in grades eight through 12 what their plans were after high school. Most (71%) answered "Go to college." "Go to trade school" was the next-highest response (11%), indicating a large percentage of respondents intend to continue their education beyond high school. Of participants indicating they wanted to go to college, 31% answered that they were planning to attend the University of Nevada, Reno, the highest of all responses.

Discussion/Next Steps

Overall, results from the 4-H Experience ($Mean = 3.54$) and Universal ($Mean = 3.48$), both on a 1-to-4 scale, reveal that youth engaged with the 4-H Program are reporting a high level of positive engagement and skill development through participation in 4-H. Nevada 4-H members are indicating that they have a positive relationship with a caring adult, a safe and inclusive environment, engagement in learning, and opportunities to serve others. Youth are developing character, growth mindset, persistence, decision-making and ethics, which are important for academic and workplace success. These findings are consistent with other research showing that 4-Hers are four times more likely to contribute to their communities. These results are also consistent with national 4-H studies that have found 4-H youth are thriving in school engagement and positive and healthy development (Lerner & Lerner, 2013). More than 80% of Nevada's high school respondents have plans to continue their studies beyond high school (college or trade school), as reflected in the high mean scores in these scales. This finding is encouraging for a program designed to provide youth with skills that will be useful to them beyond childhood and adolescence.

In summary, we learned much in terms of survey distribution and collection with this initial statewide survey effort, and current results establish baseline data that can be compared with future statewide survey data. The working group is using the data and addressing one year of data with a small percentage of youth. Limitations of the study included: the response rate did not represent the greater Nevada 4-H population; the survey was designed to get broad-based responses, not a targeted response; there was no control group; and there was oversampling of participants, which biased the study toward youth who were very involved in 4-H. The working group is focusing on ways to increase the response rate and reach a broader 4-H audience. A slightly modified survey was distributed in fall 2019.

References

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- Lerner, R. M. & Lerner, J. V. (2013). *The positive development of youth: Comprehensive findings from the 4-H study of positive youth development*. Middlesex, MA: Tufts University Institute for Applied Research in Youth Development.
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- Usinger, J., Chvilicek, S., Evans, W. P., Freeman, B., Killian, E., & Ponte, J. (2014). *Shifting the Culture: Strengthening the internal/external recognition of University of Nevada Cooperative Extension 4-H youth development*. Reno, NV: University of Nevada Cooperative Extension.



Girl preparing to fly a propeller. Boy shooting a bow and arrow at a target.
Photos by Carrie Stark, Nevada State 4-H Office.

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Appendix A

2018 Nevada 4-H Annual Survey Items, Means and Standard Deviations

Table B-1 – Outcome – 4-H Experience

Survey Item	Mean	Standard Deviation	Number of Responses
Is 4-H a place where adults care about you?	3.85	0.45	276
Is 4-H a place where you feel left out?	3.63*	0.70	276
Is 4-H a place where others like you?	3.58	0.62	274
Is 4-H a place where you feel safe?	3.86	0.38	276
Is 4-H a place where you get to figure things out for yourself?	3.35	0.78	277
Is 4-H a place where it's okay for you to make mistakes?	3.70	0.58	277
Is 4-H a place where you get to teach others what you've learned?	3.51	0.80	277
Is 4-H a place where you get to do things that you like?	3.72	0.60	276
Is 4-H a place where you're encouraged to plan for your future?	3.52	0.78	274
Is 4-H a place where you get to choose what you want to do?	3.44	0.78	276
Is 4-H a place where adults make the decisions?	2.48*	0.85	276
Is 4-H a place where you have a chance to be a leader?	3.51	0.83	277
Is 4-H a place where you learn about ways to help your community?	3.72	0.63	277
Is 4-H a place where you feel you belong?	3.66	0.64	277
Is 4-H a place where you get to help make group decisions?	3.53	0.75	275

*Item mean was reverse-coded for comparison purposes (i.e., 1 = yes, 2 = usually, 3 = not really, 4 = no). All items were rated high with mean scores of 3.5 and higher.

^4-H Universal items were only asked to respondents in the eighth through 12th grades (44% of overall sample). Cronbach's Alpha score was .83.

*For more information on how the survey and data were collected, contact Brian Luckey, bluckey@nevada.unr.edu or the lead author, Jill Baker-Tingey, tingeyj@unr.edu.

Appendix B

2018 Nevada 4-H Annual Survey Items, Means and Standard Deviations

Table B-2 – Outcome - 4-H Universal

Survey Item	Mean	Standard Deviation	Number of Responses
Do you like to learn new things?	3.72	0.55	122
Are you afraid to try something you might get wrong?	2.90*	1.04	120
Do you try to learn from your mistakes?	3.76	0.50	118
Are you willing to work hard on something difficult?	3.70	0.57	120
Before making a decision, do you stop to think about your choices?	3.38	0.62	120
Do you think about how your choices affect others?	3.37	0.73	119
Do you set goals for yourself?	3.51	0.73	120
Do you keep trying until you reach your goals?	3.66	0.54	119
Do you treat others the way you want to be treated?	3.72	0.50	120
Do you follow the rules even if no one is watching?	3.66	0.60	122
Do you help others reach their goals?	3.54	0.58	120
Is it hard for you to be leader?	2.99*	1.02	122
Do you show respect for others' ideas?	3.74	0.44	121
Are you comfortable working in groups?	3.64	0.59	122
Do you think about other people's feelings before you say something?	3.43	0.61	122
Do you look for ways to involve all members of a group?	3.66	0.61	122
Do you have a hard time speaking up in a group?	2.83*	1.04	120
Do you get along with others who are different from you?	3.48	0.74	120
When someone makes you upset, can you still work with them?	3.25	0.76	120
Do you like to learn about people who are different from you?	3.58	0.69	120
Are you willing to try something you might get wrong?	3.69	0.62	120
Are you comfortable being a leader?	3.40	0.83	119
Is it easy for you to speak up in a group?	3.30	0.84	118

*Item Mean was reverse-coded for comparison purposes (i.e., 1=yes, 2=usually, 3=not really, 4=no) All items were rated high with Mean scores of 3.5 and higher.

^4-H Universal items were only asked to respondents in the 8th through 12th grades (44% of overall sample). Cronbach's Alpha was .80.