Combining Theory and Technology to Evaluate 4-H Camp: Results of the 2009 Nevada Central/Northeast Area 4-H Camp Evaluation

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INTRODUCTION

The 4-H program is recognized as one of the oldest and largest youth development programs in the United States. Previous studies have also documented that 4-H is one of the most successful youth development programs, specifically in terms of teaching life skills to youth through their participation in 4-H (Boleman, Cummings & Briers, 2004; Singletary, Smith & Evans, 2004; Singletary, Smith & Evans, 2001). Research also suggests that 4-H’s strength over other youth development programs is its use of hands-on educational activities and nearly exclusive reliance upon volunteers who serve as teachers and mentors (Fritz, Karmazin, Barbuto, & Burrow, 2003; Hutchins, Seevers, & Van Leeuwen, 2002). Volunteer leaders routinely interact with 4-H youth, providing hands-on instruction, support and guidance. Research indicates that youth development programs with these specific features directly lead to positive developmental processes in youth (Eccles & Appleton-Gootman, 2002; Lerner, 2004).

Volunteer leaders actively involved with 4-H programs also learn and practice life skills, in particular skills important to working positively with youth (Singletary, Smith & Evans, 2006; Singletary, Smith & Evans, 2005). The 4-H camp program, in particular, provides an intensive opportunity for youth and volunteer leaders to develop and further refine life skills in a residential camp setting.

4-H camps provide a ready opportunity to evaluate the effectiveness of the 4-H program in teaching life skills. Evaluations of 4-H camp impacts have focused primarily on measuring the impacts on 4-H youth campers solely, however. For example, one evaluative approach emphasized life skills development, personal growth and camper satisfaction under the guise of the “fun and friendship” promoted through the outdoor camping experience (Arnold, Bourdeau & Nagele, 2005). Similarly, another approach focused on how the 4-H camp experience influences the development in youth campers of life skills and leadership (Garton, Miltenberger & Pruett, 2007) and, specifically, impacts of camp on third-to-fifth grade youth (Loeser, Bailey, Benson & Deen, 2004). Finally, another evaluative effort utilized a creative approach by encouraging campers to showcase what they had learned in tri-fold displays to share in their communities following the camp experience (Boleman, Rollins & Pierce, Jr., 2009).

Existing research literature that evaluates the impacts of 4-H camps indicates pioneer efforts. And, to date, scant efforts have been made to evaluate the impact of the 4-H camp experience on all participants, including youth campers, teen leaders and adult volunteers. The need for a consistent instrument and methodology to evaluate the impacts of 4-H camp is especially important given the increasing numbers of new and additional summer camp programs offered to Nevada’s youth. Understanding the impacts of 4-H camp on youth campers can help to build stronger camp youth development experiences and work to perpetuate the legacy of 4-H camp as a special opportunity to advance life skills learned through 4-H, for campers as well as the teens and adults involved in the camp experience.

University of Nevada Cooperative Extension (UNCE) annually organizes and offers 4-H camps to Nevada youth ages 9 through 13 at the Nevada 4-H Camp facility located at
Lake Tahoe. The Central/Northeast Area Camp typically includes youth from Churchill, Humboldt, Lyon, Mineral and Pershing counties. Youth from the entire Central/Northeast Area are invited (which includes Elko, Eureka, White Pine, Lander, Northern Nye and Esmeralda counties) and, when space permits, campers from the rest of Nevada participate.

In 2009, at the request of UNCE administration, UNCE faculty and 4-H staff developed and implemented an instrument to evaluate the impacts of the Central/Northeast Area 4-H Camp. The evaluation was a pilot effort and was designed to assess what 4-H campers, teen counselors and adult chaperones gain from their participation in the camp experience. In this process, UNCE considered the national 4-H mission statement: “The 4-H program empowers youth to reach their full potential, working and learning in partnership with caring adults” (4-H National Headquarters, 2009). The Nevada 4-H mission statement was also incorporated into the evaluation design effort: “4-H is a community of young people across America learning leadership, citizenship and life skills” (UNCE, 2009). As a result, the pilot evaluation instrument attempted to measure the following:

- Life skills campers, teen counselors and adult chaperones learned and/or applied while at camp;
- Effects of pre-camp training on the experience of adult chaperones and teen counselors to work with youth while at camp;
- Campers’ preferences for camp activities offered; and
- Camp participant demographics.

Life skills featured in this evaluation were based on the Targeting Life Skills model, which defines life skills as “skills that help an individual to be successful in living a productive and satisfying life” (Hendricks, 1998). Figure 1 illustrates the 4-H Targeting Life Skills model which incorporates the 4-H youth competencies celebrated by the 4-H Pledge: Head, Hands, Heart, and Health. This model has been used by many practitioners as a holistic approach to youth development.
EVALUATION METHODS AND PROCEDURES

The evaluation instrument developed for this pilot effort featured questions based on a Likert-type scale using a five-point response structure with 1 being, “strongly disagree” to 5, “strongly agree.” Demographic questions included county of residence, ethnicity, gender, and for campers, their age. The impact evaluation targeted three separate participant groups attending camp: campers (9-13), teen counselors (14-18), and adult volunteer chaperones (19 and older).

The evaluation was conducted on a Friday, the last full day of camp. The camper evaluation was conducted during three Morning Activity sessions with the entire population of campers, which were approximately 35 campers per session. The teen counselor evaluation was conducted with all but one of the teen counselor population (n=16) in one session before lunch on Friday and the adult chaperone evaluation conducted with the entire population of adult chaperones (n= 19) in one session that evening.
UNCE 4-H program staff designed and conducted the evaluation instrument using Turning Point Technologies software with Microsoft PowerPoint and infrared response technology. Each participant was provided a remote hand-held device to record their responses to each question as illustrated and stated on a PowerPoint slide. A 4-H Program Instructor read aloud each question and allowed sufficient response time for the participants to answer each question. Participants were able to see their cumulative responses to questions as those responses were recorded by the software. This research method created an experiential learning opportunity for participants while ensuring anonymity in the collection of evaluation data.

RESULTS

Descriptive statistics were used to summarize the results of the evaluation administered during the 2009 Nevada Central/Northeast Area 4-H Camp. For this pilot evaluation effort, data analysis was intentionally simplistic, with the overall goal being the development of question items and the assessment of methods appropriate for camp settings and participants.

Camper Evaluations

Looking at the camper demographics first, the majority of campers (n = 105) were from Lyon County (44.76 percent), followed by Churchill (21.90 percent), Pershing (14.29 percent), Humboldt (12.38 percent), Washoe (4.76 percent) and Clark counties (1.90 percent). The majority of the campers (n = 109) were female (72.48 percent) with 27.52 percent male campers. The 4-H age of campers (n = 107) was fairly evenly distributed among the 11-13 year-old range (11 years, 23.36 percent; 12 years, 23.36 percent; 13 years, 24.30 percent), with 9-10 year-olds representing 14.02 percent and 14.95 percent of the camper population, respectively. The majority of campers (n = 109) were white (46.79 percent), with the remainder indicating other (40.37 percent), American Indian (6.42 percent), African American (3.67 percent) and Hispanic/Latino (2.75 percent).

Campers were asked four questions to assess the impact of camp in terms of developing life skills including self-confidence, self-esteem, ability to adapt to new situations and ability to work with others. Figure 2 illustrates that more than half of campers strongly agreed (61.54 percent, n = 104) with the statement, “I had fun at camp.”

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1 This question may have confused campers who were either uncertain of their ethnicity or may have been confused by a camp lecture that encouraged campers to consider they each were of more than one ethnicity.
Figure 3 illustrates that more than half of campers strongly agreed (62.73 percent, n = 110) with the statement, “I made new friends at camp.” It should be noted, however, that a small number of campers strongly disagreed with these statements [had fun, 6.73 percent, n = 7; made friends, 5.45 percent, n = 6], while 11.54 percent neither disagreed nor agreed with the statements (indicated OK, meaning neutral).

Figure 4 illustrates that the majority of campers (69.16 percent) strongly agreed with the statement “The teens and adults helped me feel comfortable and included at camp.” Of the remaining campers, 10.28 percent indicated that they did not agree or disagree (OK), 4.67 percent disagreed and 5.61 percent strongly disagreed.
Finally, Figure 5 illustrates that campers (46.79 percent) strongly agreed that they practiced teamwork with their assigned camper group (Color Group). This question produced the largest number of campers who indicated either neutral or negative responses in that 12.84 percent were neutral, 3.67 percent disagreed and 8.26 percent strongly disagreed.

![Figure 5. Campers: I practiced teamwork in my Color Group.](image)

Regarding camper evaluation results, while the majority of campers indicated positive camp experiences, the percentage of campers indicating negative or mixed results specify that more camp planning efforts may need to occur to assure, to the greatest extent possible, that all campers have positive experiences while developing and practicing life skills at camp.

**Teen Counselors and Adult Chaperones**

The majority of teen counselors (n= 16) were from Lyon County (50.0 percent), followed by Churchill (35.5 percent) and Pershing counties (12.50 percent). More than half of the teen counselors (n = 16) were female (56.25 percent) with 43.75 percent male counselors. Similarly, the majority of adult chaperones (n = 19) were from Lyon County (42.11 percent), followed by Churchill (31.58 percent), Humboldt and Pershing (10.53 percent each) and Washoe County (5.26 percent). More than half of the adult chaperones (n = 19) were female (76.19 percent) with 23.8 percent male chaperones.

Figures 6-9 illustrate the responses of both teen counselors and adult chaperones using bar graphs to allow for comparisons of frequencies per choice per group. The questions designed for these adult and teen volunteer leaders also correlate to the Targeting Life Skills Model. In addition, these questions were tailored specifically to the roles of adult chaperones and teen counselors at Nevada NE/Central Area Camp.
Looking at Figure 6, 14 of the 19 adult chaperones and 10 of the 16 teen counselors strongly agreed they “felt part of a team with fellow chaperones/counselors while at camp.” However, three of the teen counselors and two of the adult chaperones were neutral (OK), while at least one teen disagreed and one adult strongly disagreed.

Figure 6. Teens/Adults. I felt I was part of a team with fellow Counselor/Chaperone while at camp

Figure 7 illustrates similarly that the majority of teens and adults felt positive about their camp experience. Eleven chaperones and 10 teen counselors agreed or strongly agreed with the statement “I felt part of an effective youth/adult partnership” while at camp. However, four adult chaperones and three teen counselors felt neutral while four adults and three teens either disagreed or strongly disagreed.

Figure 7. Teens/Adults. I felt I was part of an effective Youth/Adult partnership.
Figure 8 illustrates that the majority of adult chaperones (n=9) who attended the pre-camp training agreed or strongly agreed that they learned the tools to be successful at camp. In contrast only two of the eight teen counselors who attended the same training agreed or strongly agreed that they learned these tools at camp training. The majority of teens (n = 4) indicated they felt neutral in response to this statement while two disagreed. Neither the adults nor teens strongly disagreed with this statement.

Finally, Figure 9 illustrates that 15 adult chaperones indicated that they “received the support they needed from UNCE-4-H staff (including the UNCE-camp director) to be an effective chaperone”. In contrast, teen counselors were divided with six indicating they strongly agreed and nine indicating they felt neutral and one indicating they strongly disagreed.
CONCLUSIONS AND RECOMMENDATIONS

This publication documents the first formal effort to evaluate and report the impacts of Nevada 4-H Camps, beginning with the Central/Northeast Area 4-H Camp. The information reported here will be useful in planning future camps. Specifically, the evaluation results reflect the need to define more clearly the mission of 4-H camp for campers, teen counselors and adult chaperones, in terms of what they gain from their participation. A well-defined camp mission statement, combined with the Targeting Life Skills Model, among other proven youth development models, can help to determine which camp activities are more likely to increase life skills youth learn while at camp. Or, at the least, what kinds of camp activities provide specific opportunities to practice life skills learned.

Similarly, UNCE-4-H staff involved with planning and implementing pre-camp training may utilize the feedback from this pilot evaluation to more closely scrutinize the pre-camp training content presented to adult chaperones and teen counselors. Such scrutiny merits staff members to ask themselves the following questions:

- Do adult chaperones and teen counselors understand their roles as leaders in the context of a residential youth camp setting?
- Do adult chaperones and teen counselors understand what exactly is expected of them in terms of working well together as a team?
- Do adult chaperones and teen counselors recognize how their leadership roles may differ or are similar?
- Do adult chaperones and teen counselors understand how their interaction with youth campers on a daily basis may impact youth campers’ learning experiences?
- Does the pre-camp training specifically address these issues and expectations of adult chaperones and teen counselors while at camp?
- Do teens and adult volunteers have the opportunity to evaluate the pre-camp training?
- Are adult chaperones and teen counselors required to attend and complete a pre-camp training prior to attending 4-H camp?

UNCE 4-H program staff members plan to further develop this evaluation instrument and methodology for future use at camp. The questions outlined above will be incorporated into future camp impact evaluations. The questions could be framed in terms of a process or procedural checklist that camp evaluations should include or consider.

Additional goals for further instrumentation development will increase the focus on the life skills campers learn and/or practice while attending camp. Question items developed will reflect life skills featured in the Targeting Life Skills Model and similar youth development learning models.

Future camp impact evaluations may also seek to understand if gender differences exist between campers in terms of life skills learned and/or practiced while at camp. This is also applicable to campers’ overall satisfaction with the camp experience. Gender
differences may also exist with respect to adult chaperone and teen counselor perceptions toward camp, as well as pre-camp training.

Ongoing development, implementation and refinement of questions are needed to more effectively and accurately assess the impacts of camp on teen counselors and adult chaperones. Also, plans are under way to develop an evaluation instrument and methodology that might be implemented at all Nevada 4-H camps.

As Arnold (2008) advises, Cooperative Extension faculty and staff must keep in mind that a more rigorous evaluation design does not always produce more useful results. The degree of rigor is determined by expertise, time and budget as well as the needs of the stakeholders. Determining the best evaluation instrument or design is more about balancing such considerations than it is selecting a design from a pre-determined menu of evaluative rigor. And, as Diem (2002) plainly states, “…there is no holy grail of program evaluation” and “no method alone is likely to solve all your problems or answer all your research questions.”

When assessing Cooperative Extension program impacts, Arnold’s and Diem’s recommendations support the concept of ongoing and purposeful experimentation with evaluation instruments and methods. Ideally, experimentation with evaluative questions based on theoretical youth development models and evaluation methods to ensure participation of varied ages and participation groups will help to determine the “best” questions to ask and “how” to best ask them. Meanwhile, conducting evaluations repeatedly, over a period of time, will help to determine what instruments and methods work well while also serving to identify program strengths and weaknesses. Ultimately, these efforts will serve to improve and strengthen historical Extension legacies, such as 4-H camp.
REFERENCES


![4-H Camp Dance Workshop](image)