



February 2013

Volume 51 Number 1

Article Number:

1RIB4

## Current Practices for Training Staff to Accommodate Youth with Special Health Care Needs in the 4-H Camp Setting

**Lauren Mouton**

Volunteer Coordinator at Camp Aldersgate, Inc.

Camp Aldersgate

Little Rock, Arkansas

**Jacklyn Bruce**

Assistant Professor

Department of Agricultural and Extension Education

North Carolina State University

Raleigh, North Carolina

[jabruce2@ncsu.edu](mailto:jabruce2@ncsu.edu)

**Abstract:** The theory of inclusion is the foundation for the study reported here; inclusion is a focus not only of formal education, but also of nonformal educational settings such as 4-H. Ideally, 4-H camps are designed to serve youth of all backgrounds and abilities. By accommodating youth with special health care needs, 4-H camps are effectively meeting the standards of the IDEA Act and the theory of inclusion. Results include current practices, strengths, weaknesses, and the comparison of such practices at 4-H and ACA camps. Camps are encouraged to use the conclusions from the study in planning and improvement efforts.

### Introduction

A study by the National Survey of Children with Special Health Care Needs (NS-CSHCN) and the National Survey of Children's Health (NSCH) addressed the prevalence of children with special health care needs. The study indicated 10.2 million (14%) of American children ages 0-17 have special health care needs (National Survey of Children's Health, 2012). Children with special health care needs have or may have "a chronic physical, developmental, behavioral, or emotional condition" requiring health and related services greater than usually required by children (McPherson, Arango, & Fox et al., 1998, p. 138).

4-H is a youth organization that serves more than seven million youth each year from different backgrounds, races, ages, and walks of life (Join 4-H!, 2006). One of the largest opportunities for youth to participate in 4-H is through its camping program. Over half a million youth participated in 4-H camping programs in 2008 (National 4-H headquarters fact sheet, 2008)). Given the prevalence of children with special health care needs in the United States, it would be fair to assume that some of these children participate in camping programs, including those affiliated with 4-H. There is little research regarding youth with special health care needs at 4-H affiliated camps.

### Theoretical Framework

The foundation for the study reported here is the theory of inclusive education, or "inclusion." Inclusion evolved from a 1970's "parent-initiated effort" to educate youth with and without disabilities in a fair, diverse, inclusive educational environment (Reid, 2010). The Individuals with Disabilities Education (IDEA) Act (1975) was enacted to ensure that "children with disabilities have the right to an education in the least restrictive environment (LRE) (Villa & Thousand, 2003). In order to provide for the holistic development of youth, formal education is complemented by nonformal and informal learning. Just as in formal education, inclusion is an important consideration in nonformal and informal settings such as after school programs, 4-H clubs, and community recreation.

With regard to informal educational settings, the most common challenge associated with inclusion was lack of training for educators (Coleman & Booth, 1984; Boone, Boone, Reed, Woloshuk, & Gartin, 2006). Over two thirds of Extension professionals surveyed in Boone et

al.'s (2006) study reported inadequate training for working with youth with special health care needs. Coleman (1984) concluded that it is important to educate leaders about various disabilities, including the mechanisms for handling situations associated with each disability. In a complementary statement, Coleman (1984) indicated the necessity for educating professionals and volunteers on reviewing and revising 4-H projects and activities in order to make them more accessible to youth with special needs.

Camping serves as a catalyst for normalization of youth, especially those with special needs (Brown, 2005; Sawin, Lannon, & Austin, 2001; Swenson, 1988; Thomas & Gaslin, 2001). The impact of this school of thought is far-reaching in the movement toward inclusive camping. To this end, the ACA Accreditation Standards are substantial, available, and supported by online tools and explanations (American Camp Association's Accreditation Standards for Camp Programs and Services, 2012). What is lacking, however, is research on the accuracy, appropriateness, consistency, and effectiveness of the policies, procedures, and content of staff training provided through these programs under these standards.

### **Purpose/Objectives**

The purpose of the study was to describe differences in the current practices for training staff on service to youth with special health care needs in 4-H and formally accredited American Camp Association (ACA) camping programs. In order to accomplish this purpose, the following objectives were established:

- Determine current practices for training staff to accommodate youth with special health care needs that attend 4-H and other ACA camps.
- Identify strengths and weaknesses of 4-H and ACA camping programs in providing staff training on the accommodations for youth with special health care needs.
- Describe the differences in the current practices for training staff to accommodate youth with special health care needs at 4-H and ACA camps.

### **Methods/Procedures**

For the purposes of the study, three distinct groups were recognized: (1) 4-H affiliated camps, (2) ACA-accredited camps primarily serving youth with special health care needs, and (3) non-specific ACA-accredited camps. The population for the study was directors of all resident summer camps in the United States, excluding for-profit camps, faith-based camps, or day camps. The sampling frame was the American Camp Association Directory of Camps ( $n=617$ ). Sample size was determined using Krejcie and Morgan's (1970) formula. A simple random sampling method was used with the ACA frame resulting in a sample size of 242 camps ( $n= 242$ ). The response rate was 40%; this rate is higher than the 27% response rate typically achieved through email surveys (Fraze, Hardin, Brashears, Smith, & Lockaby, 2002).

State 4-H Program Leaders were identified to represent the population of 4-H camps across the country ( $n=51$ ). Due to the smaller population, a census was conducted of all 4-H State Program Leaders on behalf of their respective camping programs. Forty-three states and the District of Columbia were included in the study; three states were removed from the study following indication by the State 4-H Program Leader that all camps in their state were ACA-accredited. Four states were removed after the Program Leader indicated that the state did not offer 4-H camping programs ( $n=44$ ).

The instrument used in the study was researcher designed and Web delivered via SurveyMonkey.com. A prenotice email was sent to participants prior to receipt of the original link to the questionnaire. Next, a message featuring a link to the survey via email, along with information about the importance of the study, length of time required for completion, and appreciation for participation was sent. One week later, a thank you message was sent expressing appreciation for completing the questionnaire and requesting further consideration for participation in the study if respondents had not yet done so. A replacement questionnaire was sent at 2 weeks and 4 weeks following the original email message, indicating to participants that their response had not yet been received and urging participants to consider completing the questionnaire at their earliest convenience. A final contact was made via telephone at 5 weeks following the original mailing. After 6 weeks, the questionnaire was no longer accessible to participants.

Ordinal data were collected, with items listed in a ranked system ranging from 1-4. Data were analyzed utilizing the Statistical Package for the Social Sciences (SPSS) Program 18.0 for Windows. Data were summarized using frequencies, percentages, means, and standard deviations. Kruskal-Wallis tests were used to indicate differences among responses from each of the three groups, based on a significance level of  $p \leq .05$ . Kruskal-Wallis is used when the samples are not the same size and there is an unequal interval or the dependent variable (Lowry, 2012). Additionally, post-hoc analyses using Mann-Whitney tests were performed to determine where differences existed. These tests were performed using pair-wise comparisons for each of the three groups, and differences were described based on mean ranks for each group, given a significance of  $p < .02$ .

### **Findings**

Three groups were represented in the study; 20.9% of camps that responded were 4-H affiliated, 33.9% were ACA camps specializing in

serving youth with special health care needs, and 52% were non-specific ACA camps. The number of youth in attendance at the camps greatly varied. The smallest camp reported 26 youth in attendance, whereas the largest reported service to 9,000 youth each summer. Of the 110 camps represented, 58 indicated service to at least one youth with special health care needs, 41 of which primarily serve youth in this population. Of these, the average number of youth with special health care needs served by any single camp was 162.

Participants were asked to indicate their perceived ability (yes or no) to serve youth with specific chronic conditions. Eleven camps indicated they did not have the ability to serve youth with at least one type of special health care need. Respondents indicated they were most likely to accommodate youth with asthma (86.7%), diabetes (84.8%), and heart conditions (71.4%). Camps indicated that they were least likely to safely accommodate youth with Spina bifida (28.6%) or conditions that require the use of dialysis (12.4%) machines.

Respondents were also asked to report on the current practices for providing pre-service training to staff with direct camper contact. Over 70% of provide pre-camp training of 5 days or more. Non-specific ACA-accredited camps (ACA-NS) offered the highest percentage of respondents who provide pre-camp trainings of at least 5 days. Conversely, just over one-third of 4-H affiliated camps provided pre-camp training over this length of time (Table 1).

**Table 1.**  
Length of Pre-Camp Training Offered by Camps

<b>Statement</b>	<b>4-H Affiliate</b>		<b>ACA- SP</b>		<b>ACA-NS</b>		<b>Total</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
½ day or less	1	4.3	0	0	0	0	1	.9
1-2 days	5	21.7	7	24.1	0	0	12	11.3
3-5 days	9	39.1	4	10.3	4	8.3	17	16.0
5 days or more	8	34.8	28	71.8	48	92.3	76	71.7

Note: ACA-SP = ACA-Special Populations, ACA-NS =ACA-Non-specific

Camps were asked to indicate implementation of training topics based on those required by the American Camp Association (ACA). Most camps spent "Up to 1 Hour" or more on each of the training topics required by the ACA. Only one topic, "The developmental needs of campers to be served," was covered by more than half of respondents for at least three hours. Coverage of the remaining six topics varied from "Up to 1 Hour" to "3 Hours or More" of pre-camp training time. See Table 2.

**Table 2.**  
Percentage of Camps Reporting Provision of Pre-Camp Training Topics

<b>Topic</b>	<b>4-H Affiliate</b>		<b>ACA- SP</b>		<b>ACA-NS</b>		<b>Total</b>		
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	
The acceptance, respect, and response to the multicultural diversity of our society.	None	1	4.5	1	2.6	1	1.9	3	2.6
	< 1 Hour	10	45.5	17	43.6	12	23.1	39	34.2
	2 Hours	9	40.9	8	20.5	17	32.7	34	29.8
	> 3 Hours	2	9.1	13	33.3	22	42.3	38	33.3
The developmental needs of campers to be served.	None	0	0	0	0	1	.9	1	.0
	< 1 Hour	7	31.8	6	15.4	16	14.2	16	14.0
	2 Hours	8	36.4	7	17.9	34	30.1	34	29.8
	> 3 Hours	7	31.8	26	66.7	62	54.9	63	55.3
Program differences based on developmental needs of campers.	None	0	0	3	7.7	1	1.9	4	3.5
	< 1 Hour	11	50.0	6	15.4	9	17.3	26	22.8
	2 Hours	8	36.3	12	30.8	23	44.2	43	37.7
	> 3 Hours	3	12.6	18	46.2	19	36.5	41	36.0
Structural differences based on developmental needs of campers.	None	2	9.5	2	5.3	3	5.8	7	6.3
	< 1 Hour	13	61.9	12	31.6	19	36.5	44	39.3
	2 Hours	4	19.0	8	21.1	21	40.4	34	30.4
	> 3 Hours	2	9.5	16	42.1	9	17.3	27	24.1
Techniques for behavior management based on developmental needs of campers	None	0	0	1	2.6	2	3.8	3	2.6
	< 1 Hour	8	36.4	7	18.0	6	11.5	21	18.4
	2 Hours	8	36.4	11	28.2	22	42.3	41	36.0
	> 3 Hours	6	27.2	20	51.3	22	42.3	49	43.0
Behavior management and supervision	None	0	0	0	0	1	2.0	1	.9

techniques to create a physically safe environment.	< 1 Hour	9	40.9	10	25.6	6	11.8	25	22.1
	2 Hours	6	27.3	9	23.1	17	33.3	32	28.3
	> 3 Hours	7	31.8	20	51.3	27	52.9	55	48.7
Behavior management and supervision techniques to create an emotionally safe environment.	None	0	0	0	0	1	1.9	1	.9
	< 1 Hour	8	36.4	11	28.2	6	11.5	25	22.9
	2 Hours	8	36.4	10	25.6	17	32.7	35	30.7
	> 3 Hours	6	27.3	18	46.2	28	53.8	53	46.5

Note: ACA-SP = ACA-Special Populations, ACA-NS =ACA-Non-specific

Length of pre-camp training administered to staff with direct camper contact differed among the three groups (Table 3). Differences, as indicated by Kruskal-Wallis tests, were also found in the categories of four pre-camp training topics: (1) the acceptance, respect, and response to the multicultural diversity of our society; (2) the developmental needs of campers to be served; (3) program differences based on developmental needs of campers; and (4) structural differences based on developmental needs of campers. For the topic of acceptance, respect, and response to multicultural diversity of our society, the mean rank for 4-H affiliated camps was lower than that of ACA-Non-specific camps. Regarding "the developmental needs of campers to be served" and "program differences based on developmental needs of campers," 4-H affiliated camps reported mean ranks that were lower than both groups of ACA-accredited camps. Pertaining to the topic of "structural differences based on developmental needs of campers," the mean rank of 4-H affiliated camps was lower than that of ACA-Special Populations

**Table 3.**

Kruskal-Wallis Analysis of Differences in Camps' Current Practices for Serving Youth with Special Health Care Needs—Staff Training Component

<b>Staff Training Item</b>	<b>Mean Rank</b>				<b>Kruskal-Wallis Significance</b>
	<b>4-H Affiliate</b>	<b>ACA-Special Populations</b>	<b>ACA- Non-specific</b>	<b>Kruskal-Wallis Significance</b>	
Length of Pre-Camp Training	35.50	55.65	68.62	.000	
Pre-Camp Training: Acceptance, respect...	43.52	53.95	64.99	.019	
Pre-Camp Training: Developmental needs...	41.82	62.65	59.18	.022	
Pre-Camp Training:	40.41	62.04	60.24	.019	
Program differences...					
Pre-Camp Training:	40.93	65.11	55.43	.014	
Structural differences...					
Pre-Camp Training:	45.86	61.15	58.60	.151	
Tech. for behavior mgmt...					
Pre-Camp Training:	44.52	57.24	61.10	.094	
Tech. for...physically safe..					
Pre-Camp Training:	44.95	55.62	63.13	.059	
Tech. for...emotionally safe...					

Note: Group 1 = 4-H Affiliate, Group 2 = ACA-Special Populations, Group 3 = ACA-Non-Specific

\* p > .05.

Both groups of ACA-accredited camps reported mean ranks that were higher than those of 4-H affiliated camps (Table 4).

**Table 4.**

Mann-Whitney Analysis of Differences in Camps' Current Practices for Serving Youth with Special Health Care Needs—Staff Training Component

<b>Staff Training Item</b>	<b>Groups 1 &amp; 2</b>			<b>Groups 1 &amp; 3</b>			<b>Groups 2 &amp; 3</b>		
	<b>Mean</b>	<b>Mann-</b>	<b>Mean</b>	<b>Mann-</b>	<b>Mean</b>	<b>Mann-</b>	<b>Mean</b>	<b>Mann-</b>	
	<b>Rank (4- Mean Rank H)</b>	<b>Whitney (ACA-SP) (U)</b>	<b>Sig. (p)</b>	<b>Rank (4- Mean Rank H)</b>	<b>Whitney (ACA-NS) (U)</b>	<b>Sig. (p)</b>	<b>Rank (4- Mean Rank H)</b>	<b>Whitney (ACA-SP) (U)</b>	<b>Sig. (p)</b>
Length of Pre-Camp Training	24.98	35.35	.014	22.52	44.85	.000	40.31	50.27	.107
Pre-Camp Training: Acceptance, respect...	27.80	32.81	.258	27.23	41.85	.005	41.14	49.64	.107
Pre-Camp Training:									

Dev. needs	24.18	34.85	279.00	.013	29.14	41.04	388.000	.017	47.81	44.64	943.500	.515
Pre-Camp Training: Program differences	24.05	34.92	276.00	.016	27.86	41.58	360.000	.008	47.12	45.16	970.500	.709
Pre-Camp Training: Structural differences	22.33	34.24	238.000	.007	29.60	39.99	390.500	.042	50.37	41.94	803.000	.112

Note: Group 1 = 4-H Affiliate, Group 2 = ACA-Special Populations, Group 3 = ACA-Non-Specific

\* p > .02.

### Conclusions, Discussion, and Implications

Based on data gathered in the study reported here, most camps provide educational and practical programs for staff before campers arrive that are at least 5 days in length. Data indicated there was variation in the amount of time spent on pre-camp training by topic. Only the topic "the developmental needs of campers to be served" garnered a majority of responses in a single time category.

Overall there were a few strengths in camps' current practices for providing staff training to accommodate youth with special health care needs. The provision of educational programs for staff before campers arrive, at least 5 days in length, is in line with standards set by the ACA. Additionally, all suggested training topics were included, to some degree, in pre-camp training sessions provided by camps in this study.

A lack or deficiency in the degree of awareness, education, and training for providing quality inclusive recreation programs is a common barrier (Devine & McGovern, 2001; Scholl, Smith, & Davison, 2005). Given the need for adequate training, weaknesses in current practices were noted. For two training topics, (1) "The acceptance, respect and response to the multicultural diversity of our society" and (2) "Structural differences based on developmental needs of campers," the largest portion of respondents reported "Up to One Hour" of pre-camp training time comprised of these subjects. These practices seem insufficient to, as the literature suggests, emphasize the importance of staff understanding individualized differences and the development of skills for adapting program and structural components of camp to meet the individualized needs of youth in this population (Devine & McGovern, 2001; Scholl, Smith, & Davison, 2005).

As expected, ACA-accredited camps that primarily serve special populations fared the best of all three comparison groups. Both groups of ACA-accredited camps were more likely to provide pre-camp training sessions that were greater in length than those provided by 4-H-affiliated camps. As indicated by the amount of time spent in pre-camp training, ACA-Non-specific camps placed greater value on the topic of "acceptance, respect, and response to the multicultural diversity of our society," in comparison to 4-H-affiliated camps. Furthermore, a greater emphasis was placed on "the developmental needs of campers to be served" and "program differences" based on these needs.

The results from the study indicated several areas for improvement regarding staff training on service to youth with special health care needs in the 4-H camp setting. If 4-H prides itself on providing nonformal educational opportunities to youth of all backgrounds and abilities (Americans with Disabilities Act, 1990), then strategic planning and improvement efforts must be implemented to effectively train staff to meet the needs of youth with special health care needs. The following recommendations will enable staff training on techniques for including and accommodating youth with special health care needs in these programs. Successful training is paramount to developing 4-H summer camps that effectively meet the standards of the IDEA Act, and the theory of inclusion.

### Recommendations

Camps are encouraged to use the results from the study reported here in strategic planning and improvement efforts. The study was founded on previous research completed in similar fields of study, and based on an assessment of items featured in the ACA Accreditation Process Guide. Findings from the study can be used to inform further research and practices. If implemented, the recommendations from the study reported here and other studies can improve the quality of camping programs across the country.

Trainings should increase in frequency and coverage. A majority of camps do not provide weekly in-service training opportunities at this time. In order to maintain up-to-date information for staff—on specific needs of campers for whom they are responsible, regular in-service training should be provided (Accreditation Standards for Camp Programs and Services, 2007, p. 104). Weekly trainings in simple formats such as brief staff meetings or sessions that include the update, assessment, and evaluation of camper status or information would suffice (Schirick, 2001). Additionally as directed by the ACA, all camps should provide in-service training on each of the following topics: (1) The acceptance, respect, and response to multicultural diversity of our society, (2) Program differences based on developmental needs of campers, and (3) Structural differences based on developmental needs of campers.

4-H camps should evaluate and implement new policies and procedures for the provision of inclusive camping programs for youth, starting with a foundation of ACA-accreditation. Seeking ACA-accreditation is the first step toward evaluating and implementing new policies and procedures for the provision of quality camping programs for youth. Through this process, 4-H camps should assess their current practices

for noted areas of concern.

## References

- American Camp Association's accreditation standards for camp programs and services. (2012). Retrieved from:  
<http://www.acacamps.org/sites/default/files/images/accreditation/Mandatory-Standards-for-website.pdf>
- Americans with disabilities act of 1990. (2009, March 20). United States Department of Justice. Retrieved from:  
<http://www.ada.gov/archive/adastat91.htm>
- Boone, D. A., Boone, H. N., Reed, C., Woloshuk, J. M., & Gartin, S. A. (2006). Attitudes of Extension professionals toward involvement of special needs youth in 4-H programs. *Journal of Extension [On-line]*, 44(6) Article 6FEA4. Available at:  
<http://www.joe.org/joe/2006december/a4.php>
- Brown, K. J. (2005). Therapeutic camping programs. In Steele, R., G., & Roberts, M. C. (Eds.), *Handbook of mental health services for children, adolescents, and families* (p. 305-315). New York, NY: Kluwer Academic/Plenum Publishers.
- Coleman, B. M., & Booth, N. (1984). 4-H and the handicapped: Volunteers' perceptions. *Journal of Education*, 22 (1).
- Data Resource Center for Child and Adolescent Health. (2012). *Who are children with special health care needs*. Retrieved from:  
<http://nschdata.org/viewdocument.aspx?item=256>
- Devine, M. A., McGovern, J. (2001). Inclusion of individuals with disabilities in public park and recreation programs: Are agencies ready. *Journal of Park and Recreation Administration*, 19(4).
- Dillman, D. A. (2000). *Mail and Internet surveys: The tailored design method*. (2nd Edition). New York, NY: John Wiley & Sons, Inc.
- Fraze, S., Hardin, K., Brashears, T., Smith, J., & Lockaby, J. (2002). *The effects of delivery mode upon survey response rate perceived attitudes of Texas agri-science teachers*. Paper presented at the 53rd Annual Southern Agricultural Education Research Conference (SAERC), Orlando, FL.
- Join 4-H! (2006, November 1). *National 4-H Headquarters*. Retrieved from: [http://www.national4-hheadquarters.gov/about/4h\\_join.htm](http://www.national4-hheadquarters.gov/about/4h_join.htm)
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- Lowry, R. (2012). The Kruskall-Wallis test for three or more independent samples. Retrieved from:  
<http://faculty.vassar.edu/lowry/ch14a.html>
- McPherson, M., Arango, P., Fox, H., Lauver, C., McManus, M., Perrin, J., Schonkoff, J. P., & Strickland, B. (1998). A new definition of children with special health care needs. *Pediatrics*, 102 (1).
- National 4-H Headquarters. (2008). 4-H youth development ES-237 statistics. Retrieved June 1, 2010 from: <http://www.national4-hheadquarters.gov/library/2008-ES237-stats.pdf>
- Reid, C. (2010). The inclusive classroom: How inclusive is inclusion? Retrieved from: <http://www.eric.ed.gov/PDFS/ED509705.pdf>
- Sawin, K. J., Lannon, S. L., & Austin, J. K. (2001). Camp experiences and attitudes toward epilepsy: A pilot study. *Journal of Neuroscience Nursing*, 33(1).
- Scholl, K. G., Smith, J. G., Davison, A. (2005). Agency readiness to provide inclusive recreation and after-school services for children with disabilities. *Therapeutic Recreation Journal*, 39(1).
- Swenson, T. G. (1988). A dose of Camp Dost: Meeting the psychosocial needs of children with cancer. *Issues in Comprehensive Pediatric Nursing*, 11(1).
- Thomas, D., & Gaslin, T. C. (2001). "Camping up:" Self-esteem in children with hemophilia. *Issues in Comprehensive Pediatric Nursing*, 24(4).
- Villa, R., & Thousand, J. (2003). Making inclusive education work. *Educational Leadership*, 61(2).

---

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](#)

© Copyright by Extension  
Journal, Inc. ISSN 1077-5315.  
[Copyright Policy](#)