e-Learning for 4-H Volunteers: Who Uses It, and What Can We Learn from Them?

Abstract

Orienting and training 4-H volunteers are critical to individuals and the organization. The two-part study reported here re-establishes the profile of the 4-H volunteer and evaluates both the format and content of e-Learning for 4-H Volunteers modules launched in 2006. Volunteers from seven states perceived that online modules made learning more convenient and flexible. Volunteers with 2 years of experience or less (84.2%) liked e-Learning modules regardless of their age. Although the profile of the 4-H volunteer has remained similar over the course of six decades, technology has successfully provided new options for reaching and preparing 4-H volunteers.

Kristy L. Ouellette
Assistant Extension Professor
4-H Youth & Family Development
University of Maine Cooperative Extension
Lisbon Falls, Maine
kristy.ouellette@maine.edu

Marilyn K. Lesmeister
Associate Professor
Volunteer Development & Civic Engagement
Oregon State University
Corvallis, Oregon
marilyn.lesmeister@oregonstate.edu

Jennifer Lobley
Associate Extension Professor
Volunteer Development
University of Maine Cooperative Extension
Machias, Maine
jennifer.lobley@maine.edu

Kerry M. Gross
Research Assistant
University of Maine Cooperative Extension
Portland, Maine
kerry.m.gross@gmail.com

Introduction

Volunteers are key to delivering the 4-H Youth Development program in every county in every state, across the nation. To equip 4-H volunteers to work with youth, volunteer orientation and training are needed to prepare them to address their organizational mission and prepare for their role. Historically, volunteer development has been offered via a face-to-face method by county Extension staff. When volunteers have an alternative method to gain orientation or training, Extension 4-H staff will benefit from understanding who uses another learning option, why, and to what extent that option is effective for volunteers.

A review of literature indicates that people face barriers that prevent or discourage them from volunteering. These barriers include lack of resources (such as time, money, information, skills), lack of opportunities, and/or lack of personal interest (Points of Light Foundation, 2000). Wymer and Starnes (2001) found that one of the most frequent reasons for discontinuing volunteer service is inadequate training, and Naylor (1973) argues that inadequate or poor training can actually harm the organization.

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In research focused on effective volunteer development practices, Culp, McKee, and Nestor (2005) conclude that 4-H staff cannot effectively engage volunteers unless they understand the characteristics that define and identify those volunteers. An Ohio State University study showed that 4-H staff (directors, specialists, agents, and educators) believed volunteer orientation was important; however, several 4-H programs lacked a structured training program and an evaluation system to measure effectiveness (Deppe & Culp, 2001). Given these and similar arguments, Kaslon, Lodl, and Greve (2005) reinforce the critical need for staff to examine 4-H volunteer development practices and involve the users in that evaluation.

To alleviate some barriers to participation in volunteer development and provide consistent learning in common areas of the 4-H program, specialists from the western region (Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming) developed e-Learning for 4-H Volunteers as an online educational option that was launched in 2006. This program consists of four modules (1) About 4-H, (2) Positive Youth Development, (3) Getting Started, and (4) Leadership and Teaching. At the time of the study reported here, the e-learning modules had been purchased for use in Connecticut, Maine, New Hampshire, Ohio, Pennsylvania, and Vermont.

Prior to the study, no multi-state evaluation had been conducted with volunteers or Extension staff to determine the effectiveness of these e-learning modules. The purpose of the study reported here was to ask 4-H volunteers and Extension 4-H staff how these four e-learning modules have been used to offer efficient and effective volunteer orientation and training. The researchers wanted to identify:

1. The profile of 4-H volunteers who participated in these four e-learning modules and compare it to past 4-H volunteer profiles,

2. How e-learning may improve opportunities for volunteers to access 4-H orientation and training, and

3. Aspects of e-learning that volunteers and staff like and dislike.

This article reports findings from the 4-H volunteer perspective, extracted from the larger database obtained in the study.

Method

The Survey Instrument

A survey consisting of 28 multiple-choice and open-ended response questions was designed to assess the following information about volunteers who have completed e-Learning for 4-H Volunteers.

- What is the profile of volunteers who participate in these e-learning modules?

- Why did volunteers participate in e-Learning for 4-H Volunteers?

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- As a result of e-learning, what barriers were removed for volunteers?

- How effective is e-Learning for 4-H Volunteers as an orientation and training method?

- What other, if any, volunteer development opportunities did they have?

- What length of time passed, after completing e-Learning for 4-H Volunteers, and before engaging as a 4-H volunteer?

The commercial Survey Monkey service was used to create the survey. The survey was pilot tested and revised based on feedback and suggestions from a small group of Extension 4-H staff. The University of Maine Institutional Review Board designated this research as exempt from review. Participants consented by participating in the study.

Sampling

All 19 states using e-Learning for 4-H Volunteers and having 10 or more volunteers who had completed all four modules (n=3639) prior to September 2011, were invited to participate in the study. Seven states consented to participate (Arizona, Colorado, Maine, New Hampshire, Ohio, Oregon, Washington). Instructions were provided to a staff member in each state to guide the random selection of up to 150 volunteers (who met the completion criteria) from the state data base. An email address was provided for each volunteer selected to participate.

Each volunteer received a brief description of the study and an invitation to participate. The initial survey was emailed to 781 volunteers November 9, 2011; a reminder to complete the survey was sent on December 8, 2011. The survey responses were anonymous, with identification only by state and county for the purpose of understanding how states are using e-Learning for 4-H Volunteers. Of the 781 surveys distributed, 64 emails could not be delivered, leaving a sample of 717. From this sample, 218 completed surveys were returned, yielding a 30% response rate.

Data Analysis

All data was initially sorted using Microsoft Excel and then imported into NVivo for subsequent coding and analysis of qualitative items. Responses to demographic questions about race, marital status, age, number of children in 4-H, and years as 4-H volunteer were summarized.

Perspectives about online modules were collected through two open-ended questions posed to volunteers: "What did you like about the e-learning modules?" and "What did you dislike about the e-learning modules?" Responses were coded, and themes were identified. Then the open-ended responses were analyzed with reference to data in other parts of the volunteer survey. Finally, a state-by-state analysis was conducted for the purpose of providing state reports.

Findings

Profile of 4-H Volunteer Participating in e-Learning for 4-H

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Volunteers

Over a span of almost 60 years, the demographic profile of the 4-H volunteer has changed little (Table 1). Three decades ago, the majority of 4-H volunteers were married, middle-aged females, working outside the home, and typically had children participating in 4-H. These findings are similar to the demographic characteristics of the study reported here, where participants were 87.7% female, between the ages of 40-49 (38%). However, participants in the study were different from earlier volunteer profiles in that fewer were married, fewer had children in the 4-H program, and more volunteers were employed outside of the home.

Table 1.

Profile of the 4-H Volunteer Across 60 Years

	Clark and Skelton (1950)	Banning (1970)	Denmark (1971)	Parrott (1977)	Culp (1996)	Lobley (2005)	Present Study (2012)
Area Studied	NY	42 States	TX	OK	IN	ME	7 States
Age							
Mean	-	-	41	39.74	42.51	-	44.71
Age Range	-	65% (36-55)	-	-	-	42% (36-45)	38% (40-49)
Gender							
Female			76.8%	100.0%	71.9%	85.0%	87.7%
Marital Status							
Married	-	-	95.9%	96.0%	87.3%	80.0%	77.0%
Employment							
Homemaker/ Not Employed		48.9%	61.8%	55.0%	19.0%	20.0%	14.0%
Children?	No	-	2.8%	2.6%	2.4%	7.7%	13.0%
Years as Volunteer							
Mean	7	-	5	-	11.4	-	5.2

The volunteers participating in this study served in a variety of roles in the 4-H program. Those are listed in the table below.

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Table 2.

Roles of Participating 4-H Volunteers

	Percent	Count (n=218)		Percent	Count (n=218)
Primary Club Leader	37.6%	82	Chaperon	19.7%	43
Co-Primary Club Leader	19.3%	42	County Fair Volunteer	37.2%	81
Assistant Leader	18.3%	40	After School Volunteer Staff	8.3%	18
Project Leader	47.7%	104	Officer of Leader's Association	17.9%	39
Camp Counselor	2.8%	6	Member of County or State Committee	21.6%	47

Volunteers in seven states said they participate in e-learning for multiple reasons; the following chart summarizes their responses.

Table 3.

Why Volunteers Use e-Learning for 4-H Volunteers

Why participate in e-learning?	Percentage	Count (N=218)
Required prior to application	25	54
Required training by county	59	128
Required training by state	22	49
Required for specific program	8	18
Is alternative to face-to-face training	11	25
Interested in refreshing knowledge	16	35
Fits my schedule	33	73
Eliminates need to travel	21	46
Is preferred learning method	15	32
Other volunteers encouraged it	6	14
Other	6	12

Individuals reported that some barriers to participation in 4-H volunteer development were

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eliminated through the e-Learning for 4-H Volunteers modules. Of the 218 volunteers who participated in the study, 61% (33) reported time constraints, 57% (124) reported challenging work schedules, 48% (104) reported travel, and 25% (55) reported child care issues, were alleviated.

Over half (117) of volunteers who completed e-Learning for 4-H Volunteers reported engaging in their local 4-H youth development program less than 2 weeks after completion. Thirty volunteers reported engaging in 4-H volunteer roles within t2 months. Eight volunteers became involved in fewer than 6 months. Four volunteers became involved after 6 months. Fifty-nine volunteers chose not to report.

Evaluation of e-Learning for 4-H Volunteers

Data gathered through the two open-ended questions "What did you like about the e-Learning training modules?" and "What did you dislike about the e-Learning training modules?" were used to understand the efficacy of the online training modules for current volunteers.

An initial look at the number of comments provided in response to these questions shows a significant number of "likes" (compared to "dislikes") regarding learning online. As noted in Table 4, only 26.6% (N=58) of the respondents did not provide a valid "like" about the training and, of these respondents, only one included a valid "dislike." Further, only 34.9% (N=76) of respondents offered any dislike at all. Given that a chi-square test of this cross-tabulation returned a probability under p=.05, it was concluded that these findings are not the product of random distribution, but that the e-learning modules were well received by a majority of volunteers in the study.
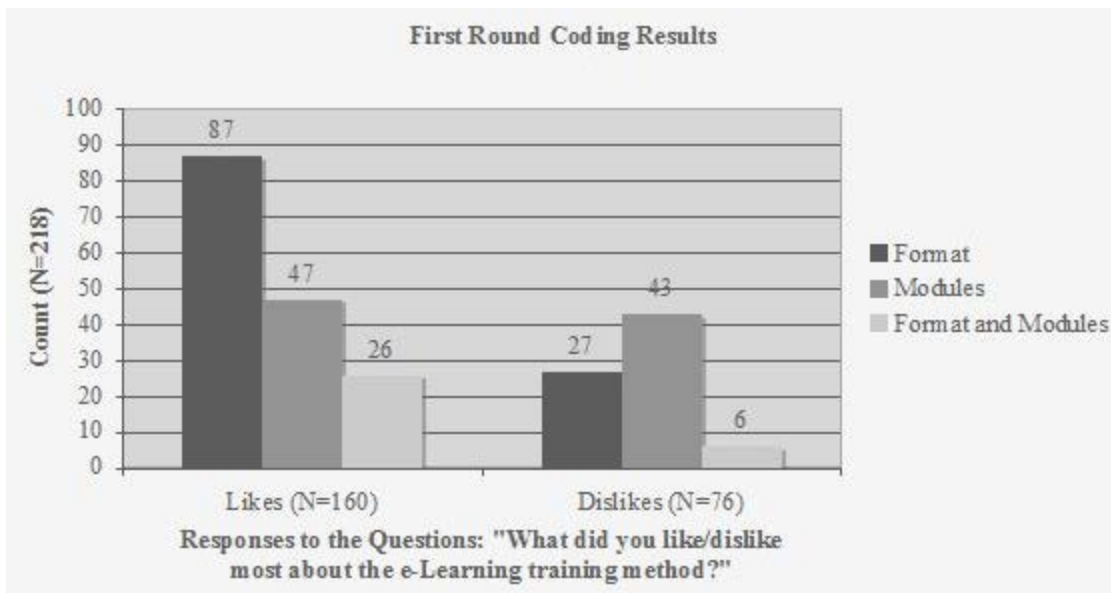
Table 4.

Cross-Tabulation of Likes and Dislikes About e-Learning

	Dislike given	No valid dislike given	Total
Like given	98.7% 75	59.9% 85	73.4% 160
No valid like given	1.3% 1	40.1% 57	26.6% 58
Total	100.0% 76	100.0% 142	100.0% 218
df=1, chi-squared=38.21, p=0.000			

Next, valid comments were coded (both likes and dislikes) based on whether they were related to the online learning format in general, to specific modules, or both . The majority of likes were attributed to the general format, whereas the majority of dislikes were related to the e-Learning for Volunteers modules (see Figure 1 for complete results).

Figure 1.

Likes and Dislikes About e-Learning

First Round Coding Results

Responses to the Questions: "What did you like/dislike most about the e-Learning training method?"

In the second stage of coding, comments were coded again within their initial categories to provide subcategories. The results from that analysis are included in Table 5. The majority of positive comments about the online training are related to a factor of convenience (self dependent or ease of use), whereas the negative comments are largely related to its presentation (impersonal or dependence on computers) and the information content (shallow or repetitive).

Table 5.

Second Round Coding Results

	Likes	Dislikes
Format	Self-determined timing (N=49)	Impersonal/ Not interactive (N=22)
	Self-determined location (N=40)	Dependence on computer skills (N=3)
	Self-determined pacing (N=27)	System Malfunctioning (N=4)
Modules	Ease of use (N=41)	Shallow/repetitive (N=33)
	Quality of information (N=32)	Length (N=11)
	Brevity (N=11)	

The most notable qualitative differences found across both the likes and dislikes were attributed to stratification by state of residence. Although there are similar broad sentiments across the breadth of the sample, the specific words used to describe the benefits and weaknesses of e-Learning are notable. Respondents in some states appreciated the time and flexibility (Oregon, Arizona), some liked the self-determined pacing (New Hampshire), and others liked both time and pacing (Maine, Washington). In the dislikes, many respondents noted that the training was impersonal, but this was attributed to not being face-to-face (Washington), not being face-to-face or in print (New

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Hampshire), and not having anyone available to answer questions (Oregon).

Table 6.

Likes and Dislikes About e-Learning Stratified by State

State	Liked	Disliked
Arizona	Time and flexibility; Quality of information; Organization of modules	Returning volunteers disliked redundancy
Colorado	Completed on own time; Good information	Long; Dry; Redundant; Didn't feel ready to lead a group
Maine	Convenience; Own time and pacing; Easy	Impersonal; Couldn't ask questions; Easy to get bored
New Hampshire	Own pacing; Can return to modules to make sure material is understood	Long; Boring; Impersonal (not face to face or in print)
Oregon	Flexible for schedule; Easy to use; Can refer back to modules; Good organization	Impersonal (nobody to answer questions); Redundant; Generic
Washington	Convenience; Own pace and schedule; In home on own time	Impersonal (not face to face); Not specific; Mostly overview

While volunteer responses varied between states, a number of factors were found to be predictive of increased likes of the e-learning modules. Volunteers who noted taking the training because it was perceived to be a requirement as a part of the application process and/or because it alleviated at least one barrier to traditional training were more positive about the online learning experience.

The respondents who were older and had lower levels of computer experience felt less prepared for their volunteer role and less positive about their learning after completing the four e-modules. Some of these respondents disliked the online learning format and wanted more access to print materials and face-to-face interaction.

Some 4-H volunteers did not feel prepared to lead a group or club, even after completing the e-learning modules. A chi-squared test run on a cross-tabulation between preparedness and dislikes, showed a probability value of 0.0291 (df=4,chi=squared=10.77), concluding that these findings are more than 95% certain the variation is not due to random distribution. It is statistically significant that, of the 82 respondents (36.2% of the total respondents) who felt "not very prepared" or "somewhat prepared" to lead a group, shared dislikes centered upon the lack of personal interaction, the length of the training, no county-specific information, or information about leading a group. In comparison, 128 respondents (59%) said they felt "prepared" or "very prepared" to volunteer after completing the e-learning modules.

From these findings, it appears that those volunteers who approached the training as an introduction (i.e., as a part of the volunteer application process) or as an alternative to traditional learning methods, were generally more positive about their e-learning experience.

New volunteers (0-2 years experience in 4-H role) were the most likely to provide positive feedback in the survey (Figure 2).

Figure 2.

Likes by Years as a 4-H Volunteer

Like given by number of years as 4-H volunteer
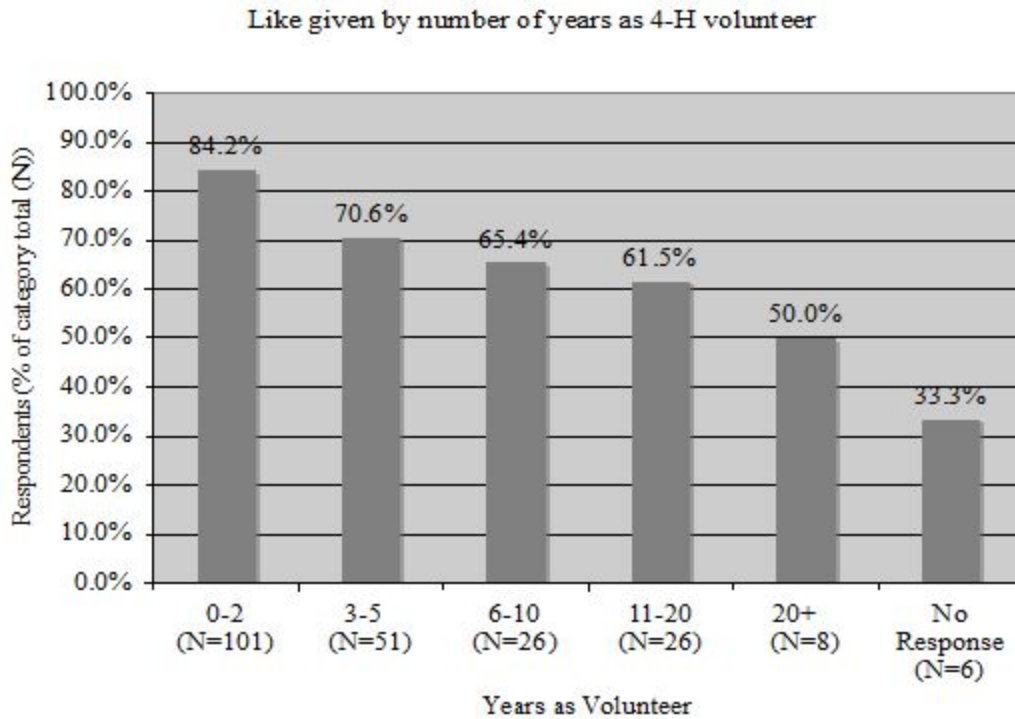
New volunteers tended to like the ease of completion, convenience, and efficiency of e-learning modules. Common likes and dislikes from this group of new volunteers are listed below in Table 7.

Table 7.
Common Likes and Dislikes from Volunteers with Fewer than 2 Years Experience

Likes	Dislikes
I could complete it in my own time and in my own home	Felt a little repetitive I get antsy sitting at a computer for too long
Easy to use and informational	Impersonal. Lacks information specific to my county
It was more time efficient than a regular meeting would have been	Lacked the ability to ask a real person questions about the content

Limitations of Study

A small team of Extension 4-H staff piloted the survey instruments designed for staff and volunteers. The volunteer survey may have been more effective if volunteers from several states had been involved in piloting the survey instrument to be distributed to their peers. The survey also included open-ended questions, which can provide rich data for the study, but are time consuming to complete. Little data is available for some survey questions, such as, "What have you done different after completing the e-learning modules?" because few volunteers chose to respond.

The language and volunteer traditions vary in the 4-H program among states and regions of the United States. The survey questions were developed in the language and traditions of one region. Some survey questions may not have been fully understood or accurately interpreted by volunteers in other parts of nation. This may have resulted in fewer responses or less accurate responses from volunteers.

There is a potential sample bias. Volunteers who choose to respond to an online survey may likely have more confidence using Web-based learning modules.

The qualifying criteria for 4-H volunteers to participate in the study (having completed all four e-modules prior to Sept. 2011) were important for the volunteer to be informed about the e-modules. At the same time, some of those volunteers had completed the e-modules about 6 years prior to participating in the study. This time lapse may have reduced the number of responses or details that were provided in open-ended survey questions. Some respondents said, "I don't remember…."

The e-learning modules can be incorporated into volunteer development programs in various ways within a state and between states. Researchers did not have documentation as to how every county, within each participating state, used the e-learning modules. Volunteer survey responses reflected those variations. Eliminating that variance could have provided stronger evaluation data.

Conclusions & Recommendations

The study reported here supports the value of e-Learning for 4-H Volunteers modules for volunteer development and specifically for volunteers with limited 4-H experience. These modules are liked by a number of individuals in each of seven states, in diverse roles, and of varied ages. The modules alleviate some barriers to participation in 4-H volunteer development. The Web-based modules may even be a preferred learning method for some individuals.

The online learning format is an effective delivery format to introduce information to new volunteer leaders. Volunteers appreciate the flexibility and accessibility of the virtual training. e-Learning for 4-H Volunteers may be best used as an introduction to the 4-H program, followed by face-to-face training, which may be better suited to offer county and state specific information, as requested by survey participants.

Volunteers with 2 years of experience or less (84.2%) liked e-Learning for 4-H Volunteers regardless of their age. This suggests additional e-learning modules could be developed and offered to 4-H volunteers to provide consistent introductory information on topics such as: youth development, teaching methods, learning styles, parliamentary procedure, and 4-H project areas, such as

Cloverbuds. Additional modules could be developed to align with the Volunteer Research Knowledge Competency (VRKC), a taxonomy based on the identified skills and competencies that volunteers need to effectively deliver 4-H Youth Development programs. This group of volunteers best represents the potential audience who could participate in the e-learning modules in the future.

Many of the dislikes associated with e-Learning for 4-H volunteers followed a theme of being impersonal. Online training provides increased convenience and flexibility in exchange for less human interaction during the learning process.

Although the profile of the 4-H volunteer has remained similar over the course of six decades, technology has provided new options for learning and preparing to be a 4-H volunteer. Extension 4-H staff can review the profile of that local program to determine effective options (content, format, and delivery) for volunteer development. It is the responsibility of Extension 4-H staff at the state and county level to plan and implement carefully, review, and evaluate frequently, in order to achieve consistent and effective volunteer development.

When Web-based learning options are part of a volunteer development plan, volunteers can enjoy greater flexibility and fewer barriers. The four modules available in e-Learning for 4-H Volunteers are effective for orientation and training for many volunteers, particularly those who are early in their 4-H role. Online learning options can support volunteer development systems and help volunteers prepare to be successful in their 4-H role.

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