

# 4-H Volunteers and the Internet: A Partnership for the Future

Claudia C. Mincemoyer, Ph.D.

## INTRODUCTION

The Pennsylvania 4-H Youth Development Program serves over 112,000 youth, ages 8-19, with the support of more than 10,000 teen and adult volunteers. Youth are enrolled as 4-H members in community clubs, project clubs, school enrichment experiences, after-school clubs, or as an individual member with an adult helper. 4-H curriculum is designed to teach life skills to enable youth to become productive, caring, and contributing members of their communities. Curricula (projects) and supporting resource materials are available, generally free of charge, from Pennsylvania's 67 county cooperative extension offices. Traditionally, 4-H volunteer leaders visit the local extension office to review curricula and supporting resources, obtain copies of project materials and receive training and support needed to effectively perform their responsibilities. Currently, a small percentage of Pennsylvania's curriculum projects are accessible on the Internet. This article explores the potential of using the Internet as a way to share curriculum resources with volunteers and discusses implications for virtually communicating, recruiting, and managing volunteers.

## BACKGROUND

The Internet has changed the way that we receive information both professionally and personally. Computers have been a common productivity and communication tool in the workplace for many years; however, use of the Internet in the home is now rapidly increasing. Kraut and Cummings (2001) characterize this shift as "domestication" of the Internet, or a move from using personal computers in a work setting, primarily for income-producing purposes, to more personal

and household purposes. This shift is mirrored in Pennsylvania as more individuals now have computer access at home than at work (PaSDC Research Brief, 2000). Fifty-four percent of the people polled in the Penn State survey reported having computers in their home while only 43 percent reported having access to a computer at work. Of those with a computer at home, over 90 percent used it to access the Internet and 95 percent used it for electronic mail (PaSDC Research Brief, 2000).

As an educational delivery system, the Internet can be interactive, responsive to the needs of its users, and provide information "on-demand." Access to educational resources for 4-H volunteers, youth, and the general public, via the Internet is easy, fast and cost-effective. By not restricting access to registered volunteers, a 4-H presence on the Internet may also prove to be a powerful recruitment tool for potential volunteers and interested youth. Culp and Nolan (2000) report that successful volunteer recruitment depends upon effective marketing to targeted populations who have an interest in the organization, its clientele, or mission. They indicate that keeping an up-to-date home page and linking it to popular and related web sites will help the organization attract and keep volunteers. Ellis (2000) supports this idea in her overview of new trends in volunteering. She notes that the explosion of the World Wide Web not only helps with recruiting, but has also begun a new form of volunteering: virtual volunteering. Volunteers can complete assignments from their homes, providing valuable services to organizations. Cravens (2000) has researched and worked with over 100 organizations that now provide on-line volunteer opportunities. The increase

---

*Claudia Mincemoyer* is an assistant professor of Agricultural and Extension Education and 4-H curriculum development specialist at Penn State University. She has been involved in the 4-H program as an extension specialist, a youth program coordinator and a county extension educator interacting with adult and teen volunteers. Her research interests are in the areas of curriculum development, delivery and evaluation. She is a member of the National Association of Extension 4-H Agents, The National Association of Extension Family and Consumer Sciences, the National Council on Family Relations and Epsilon Sigma Phi.

in the number of volunteers willing to participate in on-line volunteering experiences provides support for exploring other uses of the Internet with volunteers, such as communication and curriculum delivery.

The author surveyed all 50 states 4-H web sites to determine the extent of Internet-available curricula. Although many 4-H web sites housed only limited numbers of 4-H publications, 34 percent of the 4-H web sites had at least some curriculum resources. Several of the state's 4-H web sites went beyond access to a select number of publications. For example, the University of Kentucky has over 50 projects and resources accessible through their state 4-H web site <<http://ca.uky.edu/agcollege/4h/>> on a wide array of youth topics ranging from citizenship to woodworking. None of the sites restrict access to the general public.

#### PURPOSE OF THE STUDY

In Pennsylvania, 4-H youth curriculum committees, comprised of faculty, staff, volunteers and youth, determine new curricular priorities, curriculum delivery methods, and appropriate evaluation techniques for 4-H youth curricula. The curriculum committees are also responsible for review and revisions of existing curricula. During 2000, several of the curriculum committees discussed distributing curriculum resources using the Internet as the sole delivery method. There were no accurate data to support transferring curricula to Internet-only delivered publications. Questions of availability of access, frequency of access, and receptiveness of volunteers to utilizing this new delivery strategy were raised.

The purpose of this study was to determine if 4-H volunteers in Pennsylvania are receptive to receiving curriculum projects and resources directly from the Internet. The study also examined current rates of accessibility and frequency of access to the Internet of the population of 4-H volunteers.

#### METHODOLOGY

The target audience for this study was current adult 4-H volunteers. A stratified random sampling process was used to select the sample population. County 4-H coordinators (n=67) were each sent 15 surveys to mail to a randomly selected list of 4-H volunteers. A 4-H volunteer must be enrolled and screened to be on a current mailing list. Lists are updated at least every other year. A current roster of 4-H volunteers reduces the error of including names of people who are not in the study population. Of the 67 counties in Pennsylvania, 59 participated in the study and mailed 885 surveys to 4-H volunteers. A total of 554 surveys were returned. However, 41 did not return a consent to participate in the study and were not used, resulting in a total of 513 useable surveys. A follow-up letter with a replacement survey was sent to non-respondents (Dillman, 2000). An additional 35 surveys were returned, thus 548 surveys were used for the analysis yielding a 61.9 percent response rate (see Table 1).

Number of counties participating	Surveys returned	Surveys received without consent	Surveys used for analysis	Response rate
59 (88%)	589 (66.5%)	41 (4.6%)	548	61.9%

The survey consisted of eleven quantitative questions relating to availability and access to the Internet and e-mail, likelihood of access, frequency of access, willingness to provide an e-mail address, and two questions related to the demographic characteristics of the respondents. One qualitative question was included to ask respondents who were not very likely to access 4-H curriculum materials and resources from the Internet to indicate their reasons. Responses to this question were put into meaningful categories by the author. The categories of responses were ranked by frequency cited.

The survey questions were developed by the author and reviewed by a state program leader, an extension academic department head, and four extension 4-H youth develop-

ment educators to establish face and content validity. Descriptive statistics (frequencies and percentages) were used to analyze the data.

## FINDINGS

The major findings of this study highlight the availability and accessibility of the Internet to our 4-H volunteers, and their willingness to use it to receive information regarding 4-H projects and resources. Reasons for volunteers who are extremely unwilling to use this technology are cited.

### Computer and Internet access

Eighty-four percent of the 4-H volunteers in Pennsylvania own a computer. Over half (54.2 percent) of the volunteers who are employed have access to a computer at work. Of those who don't have a computer at home and are employed, an additional 3.9 percent have access to a computer at work. Thus, about three-quarters (75.9 percent) of the 4-H volunteers have a computer available for their use.

4-H volunteers were asked if they had access to the Internet from their home computer. Of those who had a computer at home, 69 percent had access to the Internet from this computer. Of those who did not have access at home, an additional 1.6 percent of the employed volunteers had access at work. A total of 70.6 percent of 4-H leaders who responded to the survey has access to the Internet either at home or work (see Table 2).

**TABLE 2:**

#### Computer ownership and access to Internet

	YES	NO	NA*	TOTAL
Own a computer	84.8%	15.2%		100%
Computer at work	58.0%	36.1%	5.9%*	100%
Access to Internet (home)	69.0%	15.8%	15.2%*	100%
Access to Internet (work)	38.2%	19.3%	42.4%*	100%**
Access to Internet at work or home	70.6%			70.6%

\*not applicable—don't work or don't own a computer

\*\*rounded to equal 100%

### Frequency of access to Internet

About 52 percent of 4-H volunteers access the Internet at least once/week with 33.5 percent accessing the Internet more than once each week (see Table 3).

**TABLE 3:**

#### Frequency of access to Internet

	Frequency of Access	Frequency Percent
Once/month	50	9.3%
Twice/month	66	12.3%
Once/week	101	18.9%
More than once/week	179	33.5%
Don't access	40	7.5%
NA	99	18.5%
<b>TOTAL</b>	<b>535</b>	<b>100.0%</b>

### Likelihood of accessing the Internet

Volunteers were asked how likely they were to access 4-H curriculum materials and resources from the Internet for use with their 4-H clubs (see Table 4).

**TABLE 4:**

#### Access curriculum information and resources

Likelihood of Accessing Information	Percent
Not very likely	12.1%
Somewhat likely	24.0%
Very likely	28.1%
Extremely likely	17.5%
NA	18.4%
<b>TOTAL</b>	<b>100.0%*</b>

\*rounded to equal 100%

Using a four point Likert-type scale to indicate likelihood of access, 46 percent of the 4-H volunteers were very likely or extremely likely to access 4-H curriculum materials on the Internet, if available. Twenty-four percent indicated that they were somewhat likely to access materials from a web site. About 12 percent indicated that they were not very likely to access a web site for curriculum resources. The 12 percent of respondents who were not very likely to access the Internet for curriculum resources were asked to indicate reasons why they chose this response. Responses were categorized and are listed in order of frequency of response in Table 5.

**TABLE 5:****Reasons for not accessing Internet**

Reasons	Number of Responses
No access to the Internet at home	17
Computer for work use only	12
No time to access the Internet	10
Don't use the Internet often enough	8
No computer	7
Not computer/Internet literate	5
Technical difficulties with connections to Internet	2
Already using curriculum resources from other sources	2
Can't print for club members	2
Need personal contact	2
Printed materials are easier to access	1

**Willingness to provide e-mail address to receive 4-H communications**

Using a four point Likert-type scale, over 65 percent of the responding 4-H volunteers indicated that they are willing or extremely willing to provide their e-mail addresses to receive information directly from the state 4-H administrative department. The percentage of volunteers who were not at all willing to provide their e-mail addresses was about four percent (see Table 6). About 19 percent did not respond because they do not have e-mail capability.

**TABLE 6:****Willingness to provide e-mail address**

Willingness	Frequency	Percentage
Not at all	21	3.9%
Somewhat	30	5.6%
Not sure	28	5.2%
Willing	181	33.5%
Extremely willing	175	32.4%
Not applicable	105	19.4%
<b>TOTAL</b>	<b>540</b>	<b>100.0%</b>

**CONCLUSIONS AND RECOMMENDATIONS**

There are many benefits for volunteers and the extension organization to Internet distribution of resources. 4-H volunteers are willing to use this new technology to receive curriculum resources; thus, Cooperative Extension needs to rapidly provide resources to increase

our web-based curricular offerings. Findings from this study were shared with the curriculum developers in Pennsylvania to provide them with the rationale to develop web-delivered curriculum.

Computer ownership among 4-H volunteers is higher than the ownership rate for Pennsylvania citizens and can be viewed as an asset to our information delivery system. In addition to Internet-delivered resources, e-mail communication with volunteers should be explored as a cost-effective way to distribute newsletters, updates, information about meetings and other relevant information to our volunteer corps. These communications could come from either the county extension office or directly from the 4-H state administrative office.

Providing curricula and resources on the Internet via a volunteer web site not only allows the volunteer to access the publication or resource on-demand, but also provides an opportunity for Cooperative Extension to provide links for volunteers and youth to learn more about their topics of interest. 4-H can attract them with information that they need for use directly with their 4-H clubs and then help them to learn more, or further develop their areas of expertise.

Organizations, including 4-H, who want to reach all potential volunteers, need to be cognizant of those families who do not have access. Becker (2000) reports that only about 22 percent of children in families with annual incomes of less than \$20,000 have access to a home computer, compared with 91 percent of those in families with incomes of more than \$75,000. As organizations move towards higher levels of electronic communication, other avenues for accessing the Internet for those who don't have computers or Internet connections at home should be addressed. Schools and libraries often provide free Internet access for community members and can be a resource for volunteer information and opportunities available on the Internet.

Identifying reliability of access for the volunteer is also a factor in determining how an organization distributes publications and resources. Telephone connections in many rural areas are not at the same level as in

urban communities (Samson, 1998). There can be unexpected interruptions causing user frustration. Designing web-based curricula with the end user in mind is important. A "text-only" option should be available for all curriculum resources to decrease the time it takes to download a page to the web browser, thus reducing frustration and saving time.

The Internet should not replace volunteer connections to their local extension offices but provide a way to supplement curriculum information, provide information on a "need to know" basis, and open the door for those not familiar with the vast resource base in the 4-H youth development program and Cooperative Extension.

### IMPLICATIONS BEYOND 4-H

Findings from this study conducted with the 4-H organization have implications for other volunteer organizations. Volunteers are accessing the Internet at rates that allow for frequent information sharing and updating. Similar to accessing curriculum resources, volunteers can receive updates and new information as soon as it is available. Internet distribution of information for volunteers also allows for rapid revisions and updates to ensure that current information is available to the volunteer population.

If volunteers are receptive and willing to use the Internet and communicate electronically, recruiting and involving volunteers online becomes a viable volunteer management tool. Communication is quick, cost-effective and timely. Volunteers also have the ability to network with each other, providing support as well as sharing information. Willingness to use the Internet to review and evaluate curriculum, distribute newsletters, policy updates and other volunteer resources requires a commitment of time and effort. Volunteer organizations should see this as an opportunity to go beyond basic e-mail communication and provide in-depth virtual information or volunteer development opportunities.

Increased access and use of the Internet may also provide an opportunity to reach those who traditionally would not volunteer. For example, Ellis (2000) discusses using the Internet to reach volunteers who have a dis-

ability or are restricted by schedules or other commitments. Internet resources and dialogue may allow them to provide viable volunteer services. Ellis (2000) also highlights the potential of developing an on-line volunteer mentoring program where existing volunteers may be able to mentor newly recruited volunteers.

The potential to capitalize on volunteer access and receptivity to Internet use is great for 4-H and other organizations that rely on volunteers to carry out their missions. Benefits can be realized for both the organizations and their volunteers.

---

### REFERENCES

- Becker, H. (2000). Who's wired and who's not: Children's access and use of computer technology [Electronic version]. *Children and Computer Technology*, 10(2), 44-75.
- Cravens, J. (2000). Virtual volunteering: On-line volunteers providing assistance to human service agencies [Electronic version]. *Journal of Technology in Human Services*, 17, 119-136.
- Culp, K. & Nolan, M. (2000). Trends impacting volunteer administrators in the next 10 years. *Journal of Volunteer Administration*, 19(1), 10-19.
- Cummings, J. and Kraut, R. (2001). *Domesticating computers and the Internet*. The information society. Retrieved March 22, 2002 from Carnegie Mellon University's Home Net Web site: <http://homenet.andrew.comu.edu/progress/research.html>
- Dillman, D. (2000). *Mail and Internet surveys: The tailored design method*. New York, NY: John Wiley & Sons, Inc.
- Ellis, S. (2000). An update on volunteer trends. Retrieved, March 25, 2002 from <http://www.energizeinc.com>
- Ellis, S. (2000). Benefits of using the Internet to find and involve volunteers. Retrieved March 25, 2002 from the Virtual Volunteering Project, part of the RGK Center for Philanthropy and Community Service at the University of Texas at Austin's LBJ School of Public Affairs Web site: <http://www.serviceleader.org/vv/>

- Ellis, S. (2000). *Midterm reflections on the virtual volunteering project*. Retrieved March 25, 2002 from the Virtual Volunteering Project, part of the RGK Center for Philanthropy and Community Service at the University of Texas at Austin's LBJ School of Public Affairs Web site: <http://www.serviceleader.org/vv/>
- Samson, S. (1998). Technological issues for improving access to Internet web sites for rural users. *Journal of Extension*, 36(4). Retrieved February 15, 2001 from <http://joe.org>
- Sweigart, W. (1999). The Penn State Poll. The Pennsylvania State Data Center Research Brief. Retrieved February 5, 2001 from [http://www.psd.c.hbg.psu.edu/pasdc/Data\\_&\\_Information/Briefs/03-02-2000.PDF](http://www.psd.c.hbg.psu.edu/pasdc/Data_&_Information/Briefs/03-02-2000.PDF)