# Teens Teaching Internet Skills "Bridging the Generation Gap across the Digital Divide

Evaluation Report 1999-2000

**Prepared by:** 

Jane Kolodinsky, Ph.D., Co-Director

Michele Cranwell Schmidt, MPA, Evaluation Coordinator

May 2001



# **Executive Summary**

The Teens Teaching Internet Skills (TTIS) Project is a national initiative involving youth and adults from the 4-H Technology Teams in six states, including: Connecticut, Florida, Iowa, Maryland, Virginia, and Washington. This is a pilot project for a future, larger, national effort to engage youth in training individuals to navigate and obtain the needed information from the Medicare web site. The Center for Rural Studies (CRS) at the University of Vermont is the evaluator of the TTIS project. This evaluation report focuses on two distinct areas, including "best practice" of the process of the project and "learning outcomes" of the workshop participants, specifically whether or not the learner acquired computer and Internet skills to navigate and benefit from information on the Medicare website.

Based on qualitative data collected during the teen focus groups held at the National Training in Maryland in August 1999, the evaluators identified several initial expectations of the teens as well as ways to improve the training in the future. From the onset of their inv24

Results from the post test of the project administered to the teen trainers indicate that the teens perceive a positive change in all skill areas, specifically working with Senior Citizens, skills related to project management and teaching, public speaking, leadership, and knowledge and understanding of the Medicare website. Further, this intergenerational experience led to a positive change in attitude of the teens towards working with Senior Citizens and teaching them skills in technology. This change in attitude included an increased comfort level and belief that Seniors are willing, able, and open to learning new technology.

This intergenerational experience fostered a positive attitude among the Seniors, with regards to their comfort in working with teens and the teens' respect for, ability to teach, and patience with Senior Citizens. Overall, results suggest that intergenerational learning experiences benefit both parties in learning and skill development and led to a positive change in attitude towards the other generation.

# **Table of Contents**

Introduction	
Evaluation Procedures	
Results ~ "Lessons Learned" for Successful Workshops	
Baseline Data ~ Initial perceptions of need, goals, objectives, and participants	
Initial game plan	
Successful Techniques for Workshop Preparation	
Identification of Teen Trainers	
Training of Teen Trainers	
Development of an Agenda and Workshop Preparation	
Advertising for Workshops	
Locating Facilities for Workshops	
Successful Techniques for a Variety of Learning Situations	
Techniques to Deal with Differing Technological Skill Levels	
One to one ratio of participants to trainers	
Use of small groups Use of positive reinforcement	
	14

Use of Intake and Evaluation Forms	
Workshop Participant Characteristics and Learning Objectives	23
Participant Demographics	
Access and Use of Computer and Internet Facilities	
Skill Level Assessment	
Learning Objectives of the Participants	
Medicare Website Activities during the Workshop	
Evaluation of the Workshop Activities	
Impact of the Project on Senior Citizens	27
Impact on the Project on the Senior Citizens, Comfort and Skill Level with Technology Intake Analysis Evaluation Analysis Six Month Follow-up Analysis	
Comfort in Searching the Medicare Website	
Senior Citizens – Change in Attitudes towards Working with Teens	
Continued access for Seniors – Iowa and Washington	
Improvement in the lives of Senior citizens ~ A message from a Senior trainer/learner	
Impact of the Project on the Teen Trainers	35
Changes in Attitudes of Teens towards Senior Citizens	
Awards and Recognition of the Teens	
Conclusions	38
Youth Initial Expectations	
Training Approaches that Worked ~ Workshop Preparation	
Successful Techniques for a Variety of Learning Situations	
Problems and Solutions in Conducting Workshops	
"Learning Objectives" of Senior Citizens	
Demographics Access and Use of Computer and Internet Facilities	
Skill Level Assessment	41
Learning Objectives Immediate Impact of Workshops	
Workshop Evaluation	
Six Month Follow Up	42
Positive Outcomes of the Project on Youth	
Use of Intake and Evaluation forms	
Recommendations	43
National Training	
Workshop Preparation	
Evaluation Services • The Center for Rural Studies • 207 Morrill Hall • The University of Vermont Burlington, Vermont 05405• (802) 656-3021 • Fax (802) 656-4975 • http://crs.uvm.edu/ • Michele.schmidt@uvm.edu	6

# Introduction

The Teens Teaching Internet Skills (TTIS) Project is a national, intergenerational partnership sponsored by the U.S. Department of Agriculture 4-H Youth Technology Leadership Team and the Health Care Financing Administration. This is a pilot project for a future, larger, national effort to engage youth in training individuals to navigate and obtain the needed information from the Medicare web site. This pilot project involved youth and adults from the 4-H Technology Teams in six states, including: Connecticut, Florida, Iowa, Marylan

another generation, and improved attitude towards the other generation. Seniors who participate in these programs show positive change in attitudes towards computers and the Internet and gain more confidence in their own proficiency with technology. Youth who participate in these programs as the "teacher" show improved leadership skills and gain a sense of personal-worth based on their contributions to society. Research shows that intergenerational activity, where children and Seniors work together on various projects, offers heightened learning for both the youth and adults, increases self-confidence, increases cross-generational comfort levels, eliminating stereotypes that each generation may hold for the other (Bullock and Osborne, 1999; Chen, 1997; Pinquart et al, 2000; Shipman, 1999).

Teens involved in 4-H programs across the United States participate in many different types of leadership, teaching, and community service projects to enhance and build skills. Research on teens and skill building shows that after teens participate in workshops and programs that focus on areas of communication, leadership, decision making, and working with groups, there is a significant increase in their perceived leadership skills, self esteem (Groff, 1992; Kleon and Rinehart, 1998), life skills development (Boyd et al, 1992). Research also supports the empowerment of teens in 4-H programs as a way to enable youth to take on leadership positions, assume responsibility, and overall become more productive citizens (Huebner, 1998).

# **Evaluation Procedures**

The evaluation of the TTIS project was based on the seven research objectives outlined in the original grant proposal (Appendix A). Evaluation methods were adjusted based on participant and learner response and constraints that arose as the project unfolded. The evaluation methods included a variety of quantitative and qualitative assessment tools, including focus group questionnaires and a pre and post test, that involved both the trainers and learners (Caudle, 1994; Dean, 1994; Fink and Kosecoff, 1985; Fitz-Gibbon and Morris, 1978; Miller, 1994; Scheirer, 1994). These tools were designed to inform "best practices" in conducting TTIS workshops and learning objective outcomes as stated in the grant proposal. Data collected was compiled in a manner to track both individual state team and group progress in conducting workshops and track the learning objectives of the learners. Quantitative data was compiled and aggregated in descriptive form using the SPSS statistical program. Qualitative data was analyzed using N-Vivo, a program designed to organize and analyze the content of qualitative material. Details of the evaluation procedures (Appendix B) and questionnaires used (Appendices C-J) are available in the appendix of this report.

# **Results ~ "Lessons Learned" for Successful Workshops**

**Baseline Data** ~ **Initial perceptions of need, goals, objectives, and participants** During the National Training Conference in Maryland in August 1999, the evaluators held a focus group with the youth to discuss their initial perceptions of the need for this project, their goals and objectives, who the learners would be, and the learners goals and objectives for attending the workshop. Their initial plan of action was also discussed. This qualitative data provided baseline information on the teens perception of their participation before the training. The youth were initially asked why they got involved in this program. They mentioned several reasons including interests in working with the elderly, working with computers, using public speaking skills, and volunteering. They also enjoyed traveling (to Maryland) and meeting their Tech. Corps peers from other states. Several teens mentioned that they did not know that this project had the focus of teaching seniors Internet skills to search the Medicare website and felt this should have been made clear. The teens seemed intimidated with the notion that they would be teaching seniors how to search the Medicare website.

All the teens felt that there is a need for this program. The teens felt that this project will serve to introduce or improve upon the computer and Internet skills of Seniors, as Seniors could use and benefit from the information on the Internet. One teen mentioned that this type of program would be extremely beneficial to Seniors and people of all ages in rural areas as they may be more isolated from sources of information and many are beginning to own their own computer. These skills may help connect people in rural areas to sources of information to which they otherwise might not. Several teens felt that perhaps seniors are afraid of computers and these workshops could help dissuade these fears.

Initially, only a few teens of the total group had definitive goals or objectives for this project as several state Technology Teams had previous experience in this type of project. However, after a group discussion, most of the teens had several goals for this project. One state group reported that their Tech Team wanted to establish a partnership with a Senior Center, increase youth involvement with Seniors, and improve youth leadership and teaching skills. These teens also mentioned that upon return to their state, they would formally establish a plan, develop a curriculum for their workshops, and improve upon it based on trial and error. Several persons felt that the focus of their workshops would be on the improvement of Seniors' computer and Internet skills and the benefits of the resources on the Internet; they wanted to make the learning experience fun.

The focus group also discussed the teens initial fears and expectations of participating in this program. Several of the teens mentioned that they were concerned about the amount of time commitment that would be required of them to reach all areas of their state. Many wondered whether or not it would be possible to teach Seniors computer skills in two and a half hours. A few teens noted that they expected to work with Seniors who are "set in their ways" and would have to work with them to help open their minds up to the use of technology. The youth also expected to be working with a variety of skill levels at the workshops, with the possibility that some people would not have any skills in using the computer or the Internet. The teens agreed that the learners would seek training at TTIS workshops in order to improve upon their computer and Internet skills and benefit from learning about the Medicare website.

# Initial game plan

As the conference was held in the early stages of the project development, several teens were not sure how they were going to begin planning, setting up, and conducting workshops. Washington state seemed to be the most prepared for the beginning of the project as they had a "kick off" event planned for Grandparents Day. Many teens reported that they came to this conference with little understanding of their role aside from the fact that they would be working with Seniors to develop computer and Internet skills. Several teens reported that they would contact and work with a senior center in their community and hold workshops once a month, depending on the need and interest within the community. They mentioned that along with Senior Centers, local schools, Universities, and libraries would be necessary community partners in order to advertise and recruit participants and for the use of computer facilities. They would also advertise for workshops via the local newspaper or at senior centers in the community. The youth identified their intended audience as primarily senior citizens and perhaps people in their 50's.

The discussion continued around the topic of dealing with differing technological skill levels among participants and helping the learners overcome any "fear" of technology. The teens felt that a good way to break the ice about computer and Internet use, especially to a person who is not familiar with the technology, is to ask them about their hobbies or areas of interests and show how this hobby could relate to computer and Internet use. A few teens felt that it is important to help the seniors reach a point where they are able to perform a task on their own. Several mentioned that it is important to not be condescending with the seniors, recognizing that they are not from a generation where computers were widely used on a daily basis. One teen suggested that he initially dissuade the fears of seniors by telling them that they cannot break the equipment.

teams, the teens assisted in the development of the curriculum, handouts, and use of equipment. Before the workshops, the teens met beforehand to discuss and modify the agenda and inspect the computers and equipment to ensure they are working properly. The teens of one Tech team practiced their training skills through role-playing.

During the workshops, the teams used several techniques aside from verbal and use of individual computers to convey information. These include the use of a power point presentation to show parts of computer and the use of handouts, developed by both the teans and the team leaders based on the National Conference, previous Tech Team workshops, and WWW based). Many teams stressed that workshops should begin with basic introduction to the parts of the computer, allowing the learners to become familiar and comfortable with using the mouse, keyboard, monitor, etc. One team leader stressed that the workshop agenda pace of the lesson should be determined by the capabilities and interests of the students.

An example of topics covered in a workshop include:

- The Parts of the Computer getting comfortable with the mouse, keyboard, monitor, etc.
- Basic Computer Operations
- Desktop Functions
- Solitaire and other Games
- Basic Internet
- Medicare Web site

# **Advertising for Workshops**

During the pilot project, the states used local and inexpensive resources for advertising workshops and recruiting participants. For several state teams, recruitment and advertising was facilitated by their partnership with a Senior Center. One team advertised for their workshops through the collaborating Senior Center's catalog of classes and events. However the team leader of this group noted that they would like to advertise for future workshops in the newspaper in order to reach the general senior population, as the catalog has a specific target group. One team leader who advertised for workshops in collaboration with a local Senior Center tried to keep the numbers of Seniors trained at the initial workshop on the low end so the teens could get practice in working with Seniors and conducting workshops. Another team recruited Seniors through County Extension agents who worked with Senior Citizens. Further, one state team advertised through their local chapter of the American Association of Retired Persons (AARP) and their University alumni association. A different avenue taken by a few teams to promote workshops and improve word of mouth advertising, in addition to use of methods mentioned below, was through the writing of press releases in the local newspapers or newsletters that are available in both hard copy and online. These press releases included positive guotes from participants who attended the workshops; this is a form of effective testimonial advertising.

One Tech Team member from a rural area noted that the type and scope of advertising techniques are dependent upon the size of town and whether the target area is urban or rural. For example, word of mouth and flyers in public buildings may be useful in a small town, however in a larger area, direct recruitment through collaboration with a Senior Center or advertising in a newspaper might be more appropriate.

Here are some examples of advertising techniques used by the states in the pilot project:

- Collaboration with a Senior Center
- Collaboration with AARP
- Advertising in Senior Center's catalog of classes and events
- Local senior citizens radio station
- Community calendar aired on local Cable channel
- Newspaper
- Newsletter
- Flyers in community places (post offices, bank, gas station, local café, churches, etc.)
- Word of mouth
- Personal contact with Senior Citizens
- Writing a press release or short article for a newspaper

# **Locating Facilities for Workshops**

The TTIS teams were able to obtain use of a suitable location/computer facility with an adequate amount of computers with Internet access through resourceful and creative means. The majority of the teams gained the support of their local school in order to use their computer lab for the workshop. A few teams used their local County Extension computer labs for workshops. One team noted that they had difficulty finding centers with computers to reach Senior in other parts of their County, as some areas are more rural and lack adequate access to computer and Internet facilities.

Facilities for workshops held during the pilot project included:

- Local elementary/middle school computer lab
- Local High School computer lab
- State University computer lab
- Senior Center brought equipment from Tech Corp
- County Extension Office
- 4-H computer lab
- Library

Here are two different examples of how Tech Teams created a computer lab through creative and resourceful means.

One state team created a joint computer lab at no cost to the Extension office, through their collaboration with the Senior Center and the development of a youth/senior computer program in 1998. The team received a grant for their intergenerational component of the project called Computers for the Ages from Microsoft. The \$12,000 cash portion of the grant helped defray costs for the Grandparents Day TTIS event and purchased a new computer for four county 4H Tech Teams that agreed to create youth/senior education programs. The team also received \$95,000 in software through this grant. The computer labs established through this funding was used for TTIS workshops.

Another Tech Team held a workshop at their collaborating Senior Center as they felt the Seniors would be most comfortable learning in that setting. The team brought four laptops and one Mac that was being phased out at the Extension office. Internet connection was established through Webramp and the purchase of a single dial-up connection for one month from a local provider.

# Successful Techniques for a Variety of Learning Situations

# **Techniques to Deal with Differing Technological Skill Levels**

Throughout the pilot project, all of the state teams, at one time or another, faced the challenge of dealing with differing technological skill levels of the learners. This situation can hinder a workshop, however through the experience of this project, the teams discovered certain steps that can be taken to ensure that all level of learners receive the necessary attention to facilitate the learning for the group.

# One to one ratio of participants to trainers

When possible, most of the teams had a one to one ratio of Seniors to trainer at their workshops. They found this to be a successful technique, especially if participants had different skill levels or interests. With individual attention, Seniors who were ready to move on to the next step could do so with the help of their trainer, while others could take their time in working on another step. If there are not enough teens available to work one on one with the learners, a Tech Team leader recommended that workshops have "moving helpers" who can assist people when needed and offer suggestions to faster students to keep them learning.

# Use of small groups

Another team leader mentioned that use of small groups, when appropriate, to have the learners help each other. This team would often break the participants into small groups, allowing faster learners to assist slower ones.

#### Use of positive reinforcement

One state team used **positive reinforcement** and **verbal feedback** to help Seniors deal with frustrations and encourage them to move forward and take the next step.

# Advertise for a "computer literate" audience

One state team took the strategy of advertising for Seniors who have **minimal computer skills** and placed emphasis on **learning about the Medicare website**. They advertised through their collaborating Senior Center who already had an existing senior computer education program. Using this technique ensured that their participants knew what to expect from the class, was interested in the topics, and had similar computer skills. Further, it allowed the teens to focus on the Internet and the Medicare web site rather than on introducing computers. The teen trainers noted that having participants with similar skill levels makes the workshop easier to teach. The team leader felt that Seniors get more out of the TTIS workshop if they are already familiar with the basic functions of the computer. The team reported that the learners were very interested and active in the presentation and learning and had a very successful workshop.

# Flexibility to work with workshop agenda and facilities

The pilot states reported that it is also important that trainers are flexible to **modify their agenda** for the workshop based on the skill and comfort level of the participants. One state team modified their original outline before each class, to ensure that it was appropriate for the age, skill level, and the size of the group. Another team leader noted that the workshop should flow based on the capabilities of the student and readiness to move on to the next activity. This team spent two hours during a workshop working solely on computer skills, such as working with the mouse, before

attempting to allow participants to log on to the Internet for the last thirty minutes of the workshop. This team leader felt that it is important to remind the teens that they should not try to cover too much information in one session, as everyone will not accomplish the same amount during the time period. Further, another team leader noted that oftentimes, Seniors will get more out of learning one topic in depth, instead of many topics in general. The teens should teach the learners only information that they will be able to carry with them and use in the future.

One state also reported that it is necessary to be flexible with the computer facilities available as this can impose upon the workshop agenda. In one instance, the computer facilities at the school where a workshop was held, did not allow the computers to access email. Thus the participants were not able to get their own email addresses.

# Use of "Ice-Breaker" Techniques

In conducting workshops, the teams of the pilot project came up with several creative techniques to help Seniors overcome their concerns, intimidations, or fears of working with technology.

# Use of computer games

The majority of the states reported that they had the Seniors play solitaire, bridge, chess, and other computer games in order for participants to feel comfortable with the computer and using the mouse. Working with computer games, especially games in which the Seniors are familiar, helped to dissuade intimidation or fear of using the equipment. One state recommended that depending on the skills of the Seniors, it may be necessary for the Tech Corp. teams to allow the Seniors a lot of time playing games in order to ensure an initial comfort in using the computer and mouse.

One of the youths found a way to control the mouse with the keyboard through the Control Panel with a function called Accessibility Options that comes with Windows. The function is called MouseKeys, and it allows the user to carry out the function of the mouse - move, click, drag, and double-click- using the numeric keypad. This is an option for participants why find it difficult to maneuver the mouse.

#### Methods to help participants overcome intimidation of the Internet

In working with any age group, people can have intimidation about using the Internet. One state team reported that to help their participants overcome their fears about using the Internet they began their workshop by assuring them that the Internet is safe and sharing general policies about using the Internet, such as not downloading anything that the user did not initiate. In one instance, a youth of another state team reported that one couple in his workshop refuted the idea of accessing the Internet, as their home computer was not Internet capable and they did not want anything to do with the Internet. This is a situation to be expected on occasion as the audience of TTIS workshops includes people who may have never used this type of technology in their life.

Another team who worked with Seniors who were initially comfortable in using the computers allowed the Seniors time to explore the Internet on their own. The Seniors enjoyed practicing their Internet surfing skills with minimal guidance from their teen partner. Further, another state team noted that they encourage Seniors who learn the curriculum quickly to work more in depth with what they are doing or to surf the internet more and practice what we are learning on other websites.

Reflect and Review "Next Steps" for Seniors One of the goals of the project is to for senior citizens to learn computer and Internet skills, in order

# "Lessons Learned" for Improvement of TTIS Workshops

# **Establishment of Community Partners**

#### Senior Centers

Many of the state teams collaborated with a local Senior Center to recruit and advertise for workshops. One team leader stressed that collaboration with a Senior Center is essential to the success of the project. A TTIS team held a Grandparents Day "kick off" event in conjunction with the Senior Center's computer and Internet education event following a pancake breakfast. This was a successful strategy to promote TTIS workshops, as the event was widely publicized and approximately 100 Seniors attended primarily for the educational portion. In addition to collaborating with a Senior Center, one state team formed a partnership with AARP "New Dimensions" and Elderhostel.org in order to recruit and advertise for their workshops.

# Local Schools

Most of the Tech Teams also made contact with and gained the support of local schools and Universities in order to use the school's computer lab for workshops free of charge. One school was so pleased with the workshops, that they offered to open the computer lab up to Seniors during certain daytime hours.

# Know the Abilities and Interests of your Participants

Several state teams recommended that the trainers should be aware of who they are teaching and their interests and abilities. One team leader reported that trainers should ask the participants *before* coming to the workshop about their skill level with computers and the Internet and special interests/hobbies, as a way of getting to know workshop participants in order to plan the lesson accordingly. If it is not possible to gather this information beforehand, it is necessary to do so during the introduction of the workshop. By inquiring this information, trainers can understand the skill and comfort level and interests of the learners in relation to technology. Thus, the class can be tailored to meet the needs of the participants, facilitating the learning process. In several instances, workshops included people with a range computer skills, from none to basic. Thus it is important that the team takes the appropriate steps (discussed below) in order to work with varying technological skill levels.

# **Time Commitment**

All of the Tech Teams noted that it is important that the teens and adults are willing to commit time to this project, required for training, travel, and conducting workshops. It is important for the teams to have a strong adult leader who can commit the time to provide structure and guidance for the teens throughout all stages of the project. It is also important to have committed teen leaders to support the adult leader and the workshops.

Teens Teaching Internet Skills

of the day. Two of the teams held a two or three part series of workshops over a period of time. This offered the time needed to cover basic to more intermediate and advanced techniques as each successive workshop built on the skills of the previous workshop. The team who held a two part series mentioned that in the future, they would run a three part series, based on the interest of the learners who would commit to attend.

#### Relate technology to participant's interests

One Tech Team member mentioned that their team was having difficulty recruiting people in her area as most senior citizens have lived on farms all their lives and do not have a great interest in technology. Lack of interest in technology may be an issue for both rural and urban areas senior citizens have not grown up in the computer and Internet era and may not feel the need or have the interest to learn about it. However, in discussing this topic on the TTIS listserve, one Tech Team member wrote that in order to attract this group of people to workshops, advertisements and the topics of the workshop need include ways that technology can be used to help them, such as market information, weather, and financial analysis for a farmer. For this reason, it is helpful to ask the participants before or at the beginning of the workshop about their hobbies and interests so that **information can be presented in a way that will be most useful for the learners**.

# **Technical Problems and Solutions**

Many of the states did not report having any major technical problems, possibly because workshops were typically held at a computer lab that is maintained on a regular basis. In one instance, the local school district provided a support person to be present at a workshop to provide assistance if needed. As previously mentioned, occasionally the Tech Teams needed to be creative in order to set up work stations with Internet access, through the use of laptops and Webramp, especially when a workshop was held at a Senior Center where there are no or limited facilities. One team needed to set up, move, and relocate computers due to spatial issues, in order to carry out their workshop.

One team leader stressed that it is important for all of the computers to look and act the same, so there will be minimal confusion among the learners and the trainers in working with different types look 4 due tot

# Size of the Technology Team

Size of the Technology Team and availability of both youth and adults was an issue for a few teams, which resulted in few workshops being held. This is an important factor especially as the majority of the Tech Teams recommended that workshops have a one to one ration of learners to trainers. The was the case for one Tech Team as the team leader mentioned that more teens than were available for their workshops were needed to work with the large, diverse groups of learners who attended. One team leader noted that it was difficult for their small Tech Corps to keep momentum to conduct more than one series of three workshops (a continuation series), especially since the teens needed to travel long distances and transportation was not available. There were also several incidences where either teens or adults were not able to attend the workshop due to illness or conflict in schedule.

# **Use of Intake and Evaluation Forms**

Sixteen intake forms and seventeen evaluation forms were completed for the TTIS pilot project.

# Workshop Participant Characteristics and Learning Objectives

to a computer (47%; 7), while the other half reported using a computer once a month or less (20%; 3) or never (33%; 5). Use of the Internet is dichotomized in a similar fashion, however fewer people are using the Internet on a daily basis. Of the seven people who reported using a computer daily, five reported using the Internet daily and two use it once a week. Of the three people who use a computer once a month or less, two use the Internet once a month or less and one never uses the Internet. Likewise, the people who reported never using computers also do not use the Internet. Thus, responses suggest that persons who attend TTIS workshops have varying levels of experience in using computers and the Internet, thus workshops should be planned accordingly.

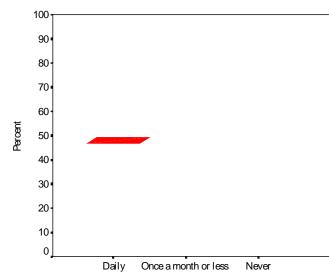


Figure 1. Participants use of a computer (n= 15)

Teens Teaching Internet Skills

The fact that many respondents did not indicate the Medicare website as a major goal for attending the workshop has several implications. First, this could suggest that either workshops were not advertised as focusing on the Medicare website, the Seniors did not recognize this as a focus of the workshop, or this was not a main goal of many learners. The third option may be explained by the respondents answers to other questions previously mentioned regarding the Medicare website, as seven out of the eleven people who responded to question 12 on the intake reported that they were not aware of being able to search the Medicare website. Further, the goals of the respondents may be explained, given their initial doubts in their abilities and possibly their desire to become better acquainted with the technology before diving into the Medicare website.

Goal	Percent (number)	
To increase my comfort level with computers	63% (10)	
To increase my skill level with computers	63% (10)	

Table 3. Goals of respondents for attending the TTIS workshop

# Intake Analysis

Overall, the majority of respondents to the intake form either disagreed or held a neutral opinion when asked if they are comfortable or skilled at using computers or the Internet. Responses are presented in Figures 3a-3d. Specifically, when asked whether or not they are comfortable using computers, 40% (6) disagreed, 20% (3) agreed, and 27% (4) held a neutral opinion (3a). With respect to skill level in working with computers, no one agreed with this statement, 63% (9) disagreed, 14% (2) were not sure, and 21% (3) held a neutral opinion (3b). Looking at comfort level in using the Internet, 43% (6) disagreed, while 21% (3) agreed, and 29% (4) were neutral (3c). More than three quarters of the respondents (79%; 11) disagreed they are skilled at using the Internet, while only one person agreed (7%), and two people (14%) held a neutral opinion (3d). Thus, results indicate that although most people disagree that they are comfortable or skilled at using the Internet, more people doubt their skill level, especially at using the Internet.

The results indicate that although some people who attend the TTIS workshops are comfortable or feel they are skilled upon intake of the program, many participants do not feel comfortable or that they are skilled. This is an important indication of the range of audience that trainers can expect to attend their workshops.

# **Evaluation Analysis**

Based on the results of the workshop evaluation, which was administered either online or in hard copy immediately following the workshop, the majority of persons agreed that they feel more comfortable and their skills have improved with using computers and the Internet after the workshop. The following results are also depicted in Figures 3a-3c. Almost three quarters of the respondents (70%; 12) agreed that they are more comfortable with using computers after the workshop, while only one person disagreed. Twenty-four percent (4) had a neutral opinion (3a). Further, 88% (15) of respondents agreed that they their skills with using computers improved after the workshop; only one person was neutral and the other person indicated they were "not sure" (3b). Responses relating to the Internet are also overwhelmingly positive as 70% (1 st after the **jeathranop2n690636**)

#### Six Month Follow-up Analysis

The six month follow up with seven of the Seniors who agreed to be contacted and were able to be reached, show that the comfort and skills level of those who have continued to use computers and the Internet after the workshop, remains high. However, there are a few exceptions for use of the Internet, as doubt continues to exist among a few follow-up respondents regarding their comfort and skill level in using the Internet.

Figure 3a. Comfort Level with using Computer, before, after, and six months after workshop

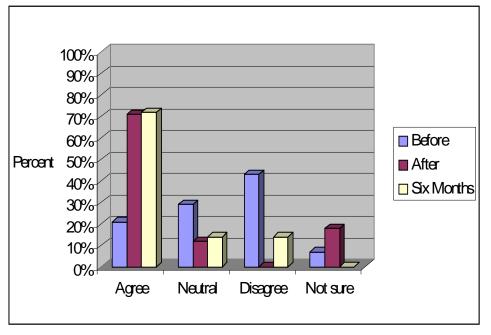
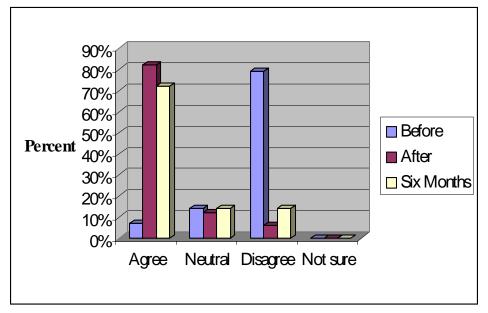


Figure 3c. Comfort Level with Using the Internet, before, after, and six months after workshop

Figure 3d. Skill Level at using the Internet, before, after, and six months after workshop



# **Comfort in Searching the Medicare Website**

Using the same lichert scale as on the previous questions, respondents were asked about their agreement with the statement "I am comfortable searching the Medicare website" on both the workshop evaluation and the six month follow-up. Figure 4 presents the following results. On the evaluation 65% indicated that they are comfortable searching the Medicare website, which is a major goal of the project. Four people (24%) were neutral and two people (12%) were not sure. However, a little more than half of the seven respondents to the six month follow-up responded that

they disagreed that they were comfortable in searching the Medicare website. Only one person agreed with this statement, one wa

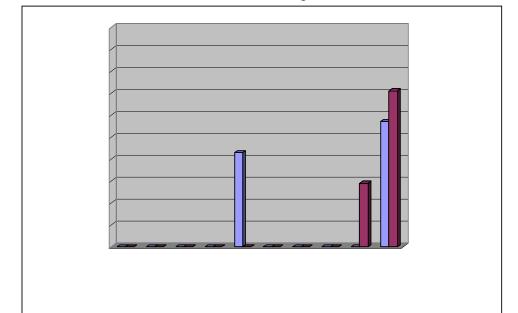
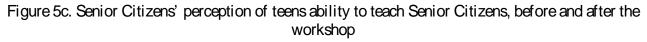
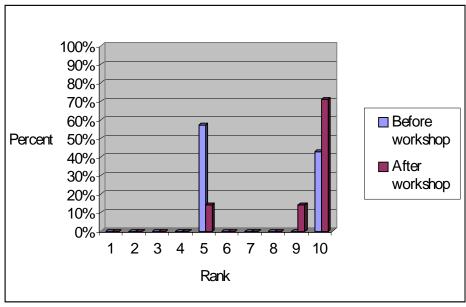
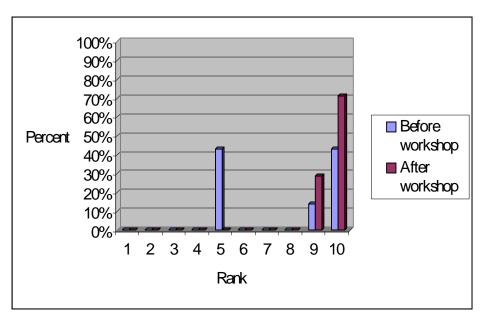


Figure 5a. Senior Citizens' Comfort level in working with teens, before and after the workshop





# Figure 5d. Senior Citizens' perception of teens patience with Seniors, before and after the workshop



# **Continued access for Seniors – Iowa and Washington**

One positive outcome of a few workshops was the continued computer and Internet access for the Seniors. In many cases, the Seniors learn new skills, however they do not have the access to the technology to practice and benefit from these skills. Data from the intake forms show that about a

quarter of participants reported having access to a computer outside of their home and a quarter do

Don Venables, Washington Impact of the Project on the Teen Trainers

At the end of this pilot project, the teens were asked to assess changes in their skills because of their participation in the TTIS project. The teens were asked to indicate the extent they felt the following skills had improved on a scale from 1 to 10, where 1 equals "not at all improved", 5 equals "moderately improved", and 10 equals "extremely improved". Table 5 presents the number of respondents, the range, mean, median, and modal responses to the given skill areas. The results show that, on average, the teens experienced positive change in all skill areas, specifically working with Senior Citizens, skills related to project management and teaching, public speaking, leadership, and knowledge and understanding of the Medicare website. The average score of these skill ranged from 6.45 to 8.45, indicating that the teens felt these skills had moderately to greatly improved.

Results from the paired t-test show that the teens had a positive change in attitude towards working with Senior Citizens after their participation in the TTIS project. Awards and Recognition of the Teens

# Conclusions

The data within this report is to inform the "best practices" of conducting TTIS workshops, with regards to the planning and impl

The teams stressed that it is important to establish community partners with Senior Centers, local schools, Universities, libraries, etc. in order to advertise and recruit participants and to use local computer facilities free of charge. Other advertising techniques included collaboration with AARP, use of Senior Center's catalog of classes and events, local Senior Citizen's radio station, newspaper (both advertisements and press releases), flyers in community places, and word of mouth.

## Successful Techniques for a Variety of Learning Situations

Based on the experience of the pilot project, the teams also provide several techniques to successfully handle a variety of learning situations. Most of the teams stress that one to one ratio of participants to learners is essential to accommodate the individual learning needs of the participants. If this is not possible, the teams suggest that teams should have moving Learning Partners or persons stationed at each row of the facilities. It is also crucial that teams are flexible to modify their workshop agenda, based on these individual learning needs. The teams should ask the participants *before* coming to the workshop about their skill level with computers and the Internet and special interests/hobbies, as a way of getting to know workshop participants in order to plan the lesson accordingly. One team leader stressed that the workshop agenda pace of the lesson should be determined by the capabilities and interests of the students. When appropriate, a few teams recommend the use of small groups at workshops. This allows them to learn together from the knowledge of other group members, as teaching others is an effective way to learn. One of the teams suggested that teams advertise for an audience with basic computer skills, thus the learners are able to review the basics and move onto learning about the Medicare website.

The teams also identified the use of ice-breaker techniques, such as the use of solitaire and other computer games with which the participants are familiar, as a way of "warming up" the participants and dealing with different comfort levels in a non-degrading manner. This technique taps into the long term memory of Seniors, helping them to become comfortable with using equipment that may be new to them. Another important technique to ensure that learners take something away from the workshop and can practice and benefit from their skills outside of the workshop, is to review with the learners "next steps" they could take to locate and use a computer and the Internet and access websites with useful information. This is important as the results of intake indicate that the respondents are either not be aware of or are not accessing local computer facilities that are open to the public. As the result of several workshops, local schools offered to provide access to Senior Citizens to their computer facilities during specific hours of the day.

## **Problems and Solutions in Conducting Workshops**

Another objective was to identify the steps that were taken by the teams to remedy problems encountered and ideas generated to improve the training program in the future. Several problems were periodically encountered by the teams, including attendance at workshops, technical problems, time, travel, and transportation constraints, and the size of the technology team.

Through the experience of the pilot project, the teams identified several different steps that can be taken to remedy the problem if low attendance in the future. These include following up with people who express interest or commit to attend the workshop, expanding the scope of advertising to include a larger population of seniors, relating technology to participant's interests, and being

flexible with workshop schedules, including time of day and time of year, to accommodate for the times that Seniors are available and able to attend.

Many of the states did not report having any major technical problems, possibly because workshops were typically held at a computer lab that is maintained on a regular basis. At times the teams needed to be creative to establish Internet connection to computers when workshops were not held at a traditional computer lab. However, one team leader stressed that, if possible, all computers should look and act the same and that comfort/ergonomics for participants is important.

Furthermore, time, travel, and transportation issues are constraints that most of the teams encountered at one time or another during the pilot project, as only a few representatives from each state were trained at the National Conference and had the responsibility to disseminate this information to other teens and adults in their state. A possible solution to these issues is for teams to organize carpools and reimburse drivers for mileage. The teams also stress that teens and adults are able to commit a certain amount of time required for the success of the project during the recruiting process of trainers. For a few teams, the small size of the Technology Team was a hindrance to conducting many workshops as oftentimes, either teens and/or adults are not available for workshops. This problem can be dealt with by holding smaller workshops and recruiting more teens and adults to participate in the project.

#### "Learning Objectives" of Senior Citizens

The following conclusions are based on participant responses to the intake and evaluation forms administered at the beginning and end of the workshops, respectively, and a telephone interview conducted six months after workshops with seniors willing and able to be reached. Unfortunately, a low number of intake and evaluations were completed, thus the conclusions are not representative of the total number of participants who attended TTIS workshops during the pilot project. This issue will be addressed in the Recommendations section of this report. However, this information is useful as it provides a baseline of data for future workshops and provides a generalization of participant demographics, goals for attending, and the impact the workshops had on the learners.

## **Demographics**

The average age of respondents was 67 years old, with a range from 31 to 87 years old. The majority of respondents are well-educated, with half completing some higher education. Further, the majority were female and a little over half of respondents were from a rural area. Most persons attended a TTIS workshop to benefit themselves, however, a quarter of respondents came to benefit someone else.

#### Access and Use of Computer and Internet Facilities

Approximately half of the respondents have computer and Internet access in their homes, however few respondents reported using facilities that are open to the public. About a quarter of the respondents do not have access to a computer or the Internet. Further, respondents have varying levels of experience in using computers and the Internet as 47% use a computer daily, while 53% use a computer once a month or less or never. Thirty-three percent of respondents reported daily use of the Internet, while the majority of respondents also use the Internet once a month or less or never.

#### Skill Level Assessment

Few respondents reported currently using skills relating to the Internet, the Medicare website, email, word processing, and creating spreadsheets. However the majority of people showed a desire to improve their skills, specifically searching on the Internet and using E-mail. Upon the intake of these respondents, many people were not aware of the tools, especially the Medicare website, the Internet, spreadsheets and word processing.

#### Learning Objectives

The top goals of respondents for attending a TTIS workshop are to increase one's comfort and skill level in working with computers, followed by learning to use the Internet in general. Almost a third of the respondents indicated learning how to use and search the Medicare website and to better inform themselves about Medicare, was a goal for attending the workshop.

#### Immediate Impact of Workshops

Overall, the majority of Senior Citizens who responded to the intake form either disagreed or held a neutral opinion when asked if they are comfortable or skilled at using computers or the Internet (Figures 1a, 1b, 2a, 2b). Thus, results indicate that although most people disagree that they are comfortable or skilled at using computers and the Internet, more people doubt their skill level, especially at using the Internet. The results of the online workshop evaluation show that the majority of Senior Citizens felt more comfortable and their skills had improved with using computers and the Internet after the workshop. Responses relating to the Internet are also overwhelmingly positive as the majority agreed that they are more comfortable with using the Internet, however three people reported they were not sure and two people were neutral. The six month follow up with seven of the Seniors who agreed to be contacted and were able to be reached, show that the comfort and skills level of those who have continued to use computers and the Internet, as doubt continues to exist among a few follow-up respondents regarding their comfort and skill level in using the Internet.

Over 80% of respondents indicated their skills with using computers and the Internet have improved after the workshop, compared to results of the intake where almost three-quarters of respondents doubted their skills at using the computer and the Internet. Sixty-five percent indicated they were comfortable searching the Medicare website, which is a major goal of the project.

Almost 95% of respondents were able to conduct a search on the Medicare website and a little over half of respondents were able to find Medicare HMO's in their area and compare the benefits of two or more Medicare HMO programs. Half of the respondents indicated a desire to search the Medicare website for information in the future.

#### Workshop Evaluation

The main responses given when participants were asked "what was the most helpful part of the workshop" included the use of the Internet, the Medicare website, the instructors, and one on one facilitation. Further, the majority of respondents agreed that the trainer proceeded at an acceptable pace and spoke loud and clear, that they were able to understand the language used by the trainer

and received enough individual attention. Further, over 80% of persons said they would recommend this workshop to their friends and family.

#### Six Month Follow Up

The six month follow up with seven of the Seniors who agreed to be contacted and were able to be reached, indicate that their perceived comfort and skill level with computers has remained high following a longer period of time after the workshop. However, the results were not as positive for the Internet. This suggests that the TTIS workshops had an immediate and positive effect on Seniors perceived comfort and skill level towards technology. However, after a longer period of time following the workshop, the comfort and skill level decreased for some of the seniors in using the Internet.

## Positive Outcomes of the Project on Youth

Results from the post test of the project indicate that the teens perceive a positive change in all skill areas, specifically working with Senior Citizens, skills related to project management and teaching, public speaking, leadership, and knowledge and understanding of the Medicare website. Further,

# Recommendations

The following recommendations should be used as a guideline for the future of the TTIS project, including the training of teams, workshop preparation and implementation, and evaluation of the project with a focus on the impact of the project on the learners.

# **National Training**

- š Inform the teens prior to the initial Training session of the purpose of their involvement in the project and the focus of teaching Seniors Internet skills to search the Medicare website.
- š Ask teens to develop a preliminary "game plan" including their goals/objectives for participation, ideas for preparing and carrying out a workshop in their community, and their fears and expectations. Hold a focus group with the evaluators, allowing the teens to discuss and share their ideas on this preliminary "game plan."
- š Hold a pilot workshop at the training so teens may get a feel for working with Senior Citizens and recognize who is their target audience. This practice will help dissuade the fears and expectations of the teens in working with Seniors, including their willingness to learn new things and working with different skill levels.
- š Discuss evaluation methods that teams will be responsible for carrying out, including the proper use of intake and evaluation forms, responsibility to send the evaluators all handouts, fliers, press releases, etc, use of the listserves, and completion of various evaluation reports.

# **Workshop Preparation**

- š Identify teens based on their knowledge of computers and the Internet, ability to work with people, interest in working with senior citizens, and willing to commit the necessary time.
- š Teams should hold a "kick off" event in the state to promote the workshops.
- š The primary target group of people who attend TTIS workshops are over 50 and persons who are eligible for Medicare (age 63), however care givers both expressed an interest and attended a few workshops.
- š Advertise and recruit Senior Citizens through means that are appropriate for the type and size of the community. It is necessary to collaborate with a Senior Center.
- š Adults and lead teens should review with trainers a half an hour to an hour before the workshop, the agenda and handouts describing the workshop curriculum and techniques in working with senior citizens. If possible, provide teens with an agenda/curriculum for the workshop before gathering for the workshop for review.
- š Identify the comfort and skill level and hobbies/interests of participants before the workshop or at the beginning of the workshop.
- š Modify the curriculum based on the skill level, interests of participants, and the number of people who are expected to attend the workshop.
- š Trainers should inspect and prepare the computers and equipment before the workshop to ensure they are working properly and are comfortable for Seniors to use.
- š Workshops should begin with basic introduction to the parts of the computer, allowing the learners to become familiar and comfortable with using the mouse, keyboard, monitor, etc. This could be done through the use of a power point presentation and/or handouts.

# Techniques for Handling a Variety of Learning Situations

- š It is important to establish a listserve for the group use, teens only, and adults only, to facilitate communication and support among the teams, evaluators, and administrators, and for evaluation purposes.
- š At the National Training, the state teams should be informed of the importance of the intake and evaluation forms, the need to use them, and how to use them correctly. This data is crucial to measuring the impact of the workshops on the learners.
- š Teams should be informed that in the event that workshop participants are not able to complete the evaluation form, an effort should be made to follow up, asking them to complete the evaluation form either online or in hard copy. A postage paid, pre-addressed envelope may be given to learners who fill out this form outside of the workshop to return the completed form to the evaluators.
- š The Technology Teams should be informed of their expectations concerning evaluation, including completing periodic reports, posting updates on the listserves, and sending evaluators materials used during the project.
- š The workshop evaluation form should be available online as this offers the participants a chance to find the website and practice their skills. A hard copy of the questionnaire should be available for persons who are not comfortable completing the online evaluation.

# References

Adler, R. P. (1996). *Older adults and computers: Report of a national survey*. SeniorNet [online] Available at <u>http://www.seniornet.org/research/survey2.html</u>

Boyd, B., Herring, D., and G. Briers. (1992). "Developing life skills in youth." *Journal of Extension* 30(4).

Bullock J. and S Osborne. (1999). "Seniors', volunteers', and families' perspectives of an intergenerational program in a rural community." *Educational Gerontology* 25: 237-251.

Caudle, S. (1994). "Using qualitative approaches." *Handbook of Practical Program Evaluation*. Jossey-Bass Publishers. San Francisco. 69-98.

Chen, N. (1997). "Building bridges – An intergenerational program." *Journal of Extension* 35(5)

Dean, D. (1994). "How to use a focus group." *Handbook of Practical Program Evaluation*. Jossey-Bass Publishers. San Francisco. 338-349.

Dieter, S. (2000). *SeniorNet Internet Survey*. SeniorNet. [online] Available at http://www.seniornet.org/research/rsch\_000517.html

Egan, E. (2000). "Bridge Building". Learning and Leading with Technology 28(3): 22-27.

Fink, A., and J. Kosecoff. *How to conduct surveys: a step by step guide*. Sage Publications. California

Fitz-Gibbon, C., and L Morris. (1978). *How to design a program evaluation*. Sage Publications. California.

Groff, J. (1992). "Teens reaching youth." Journal of Extension 30(4).

Holmquist, D. and L. Juricek. (1994). Welcoming Seniors to the computer Age." *Vocational Education Journal*, September 1994.

Huebner, A. (1998). "Examining 'Empowerment': A how-to guide for the youth development professional.

Lundt, J. and T. Vanderpan. (2000). "It computes when young adolescents teach senior citizens." *Middle School Journal* 31(4): 18-22.

Marks, K. (1996). *Report on ownership of computers and modems among AARP volunteers*. The American Association of Retired Persons Evaluation Research Services Department. Unpublished document.

Miller, T. (1994). "Designing and conducting surveys." *Handbook of Practical Program Evaluation*. Jossey-Bass Publishers. San Francisco. 271-292.

Ogozalek, V., Hayeck, E., Bush, C., and J. Lockwood. (1994). "Introducing elderly college students to multimedia: an intergenerational approach." *Recreating the Revolution. Proceedings of the Annual National Educational Computing Conference*. 240-245.

Owen, O. (1991). "The computers and the elderly program at Syracuse University: A history. Syracuse University Kellogg Project. Syracuse, New York.

Pinquart, M., Wenzel, S., and S. Sorensen. (2000). "Changes in attitudes among children and elderly adults in intergenerational group work." *Educational Gerontology* 26:523-540.

Prisuta, R.H. and R. Sutterlin. (1995). *Personal computers and older persons: Use and ownership trends and projections*. The American Association of Retired Persons. Demographic and Trend Analysis Research Divisi

# Appendices

## Appendix A

#### **Teens Teach Internet Skills - Medicare Evaluation Project**

#### **EXECUTIVE SUMMARY**

#### **Current Situation**:

The Teens Teaching Internet Skills Project is a national initiative involving seven (or so) states. This is a pilot project for a future, wider, national effort to engage youth in training individuals who need Medicare information, either for themselves or someone else, how to navigate and obtain the needed information from the world wide web. Twenty-four 4-H volunteers, delegated from their states' 4-H Technology Corp., will attend a 2-day workshop on A ugust 5 and 6, 1999 to obtain information about the program and gain skills needed to carry out the project objectives in their respective states. The training sessions by youth will commence in September 1999 and continue through June 2000.

The Center for Rural Studies (CRS) at the University of Vermont is the evaluator of the above project. Personnel in CRS and Extension in the areas of technology transfer and teaching, have a combined expertise in working with youth and elders and in conducting qualitative and quantitative evaluation methods. They also have extensive experience in the evaluation of related projects. These skills and experiences are critical to the success of the evaluation at hand.

Our evaluation will focus on two distinct areas. The first is "best practice", which will evaluate the process of teens teaching Internet skills to the intended audience. The second is "learning outcomes", which relates to whether or not participants (elders and others who need information) reached the objective of the project—learning Internet skills in order to navigate (and understand) the Medicare web site. Each of these evaluations can not be fully analyzed without some understanding of the other.

#### **Project Objectives:**

The overall objective is: To provide HCFA and REES a comprehensive evaluation, with the aim of informing best practice techniques in training that will achieve the learning objective that participants can navigate and obtain needed information from the WWW with regard to Medicare information.

#### **Procedures:**

The evaluation project will use BOTH the trainers and the learners in informing best practice and learning objective outcomes. Our steps to inform best practice are straightforward. It isst pluatio Itb roceduresor[/MCID 1eps to inform best practice are straightforward.

The above information is imperative in informing best practice, as it will allow proper targeting of teaching techniques to meet the needs of various types of Medicare information users.

#### PROPOSAL

#### **Background:**

The Teens Teaching Internet Skills Project is a national initiative involving seven (or so) states. This is a pilot project for a future, wider, national effort to engage youth in training individuals who need Medicare information, either for themselves or someone else, how to navigate and obtain the needed information from the world wide web. Twenty-four 4-H volunteers, delegated from their states' 4-H Technology Corp., will attend a 2-day workshop on A ugust 5 and 6, 1999 to obtain information about the program and gain skills needed to carry out the project objectives in their respective states. The training sessions by youth will commence in September 1999 and continue through June 2000.

From our perspective, program evaluation implicitly includes the word, "practical." Therefore, any evaluation, even at a pilot stage, should not only assess program results, but also identify ways to improve the program (Newcomer, Hatry, and Wholey, 1994). Program evaluation is embedded in the total process of developing, operating, and analyzing a particular program. Any comprehensive evaluation will include a connection with all of the following parts of a program:

- 1 determining the need for the program;
- 2 formulating goals and objectives that are based on identified needs;
- 3 designing the program to reflect specific goals and objectives;

4

#### Specifically, the objectives are:

- 1. To utilize baseline evaluations of the project volunteers initial perceptions of the project in order to inform best practice outcomes with regard to training.
- 2. To utilize quantitative baseline information from participants in the project (learners) through the use of a survey instrument developed in conjunction with the trainers, HCFA and REES contacts in order to inform best practice outcomes with regard to training.
- 3. To utilize quantitative evaluation information related to the actual training sessions that learners participated in, to inform both process and learning objective outcomes. These instruments will be administered immediately after the training sessions, through the use of a survey instrument developed in conjunction with the trainers, HCFA, and REES contacts. These instruments will collect information on process and learning objectives.
- 4. To utilize qualitative evaluation information from trainers in all states, half way through the project (March, 2000), and at the end of the project (July, 2000) through the use in-depth interviews or focus groups depending upon the ability to bring the volunteers to a central location in their state or not. The first set of data will provide information to make preliminary recommendations for improvements in the second half of the project. The second set of data will provide information to make recommendations for future implementation of the program with regard to best practice.
- 5. To utilize qualitative evaluation information from learners in all states, using focus group techniques, near the end of the project to inform meeting both process and learning objectives. Information obtained will inform both process and learning objectives though the use of retrospective and forward thinking techniques.
- 6. To develop a database that can track trainers and learners through the course of the project.
- 7. To utilize quantitative information from learners, at the end of year 1, in the form of a survey (mail or phone, to be determined) in order to inform both process and learning objective outcomes.

## **Procedures:**

All successful program evaluation is routed in use of the scientific method of any research project. Our evaluation team is well trained in quantitative and qualitative methods of data collection and analysis and has had extensive experience merging these two data types into information that can be used to inform decisions about the "Teaching Internet Skills" program.

To this end, the evaluation project will use BOTH the trainers and the learners in informing best practice (process) and learning objective outcomes. Our steps to inform best practice are straightforward. It is the interaction of both the teacher and student that results in the expected outcome. Both qualitative and quantitative methods will be involved in meeting the major objective of informing best practice guidelines with respect to training.

First, we will collect baseline information from project volunteers concerning their initial perceptions of the project. We will conduct focus groups with the 24 (or so) volunteers during the afternoon break on the first day of the training conference to obtain information about their perceptions of the audience, their game plans, and their understanding of the problem at hand. With 8 participants per group, the task will require that three individuals from the evaluation team be at the training session on Aug. 5, 1999.

Second, we collect quantitative baseline information from participants in the project (learners) through the use of a survey instrument developed in conjunction with the trainers, HCFA and REES contacts. This instrument will collect information that will allow us to (possibly, depending on size of segments) identify different segments of learners according to their need for information, the purpose of obtaining the

information, their demographic profiles, and their initial skill levels and perceptions of the technology to be used. This instrument should take no longer than 5 or 6 minutes to fill out. We expect that the trainers can administer these surveys and send them to the evaluation team for coding and analysis. Third, we will collect quantitative evaluation information related to the actual training sessions that learners participated in, administered immediately after the training sessions, through the use of a survey instrument developed with input from the trainers, HCFA, and REES contacts (and pre-tested by experts and in the field). These instruments will collect information on process and learning objectives. We will ascertain positives and negative associated with the learning experience and process, next steps for the learners, immediate changes in attitudes toward the technology, and possible changes in expected use of the Internet site. Learning objective evaluation might include whether or not the learners can navigate the site and understand the information provided. This instrument should take no longer than 5 or 6 minutes to fill out. We expect that the trainers can administer these surveys and send them to the evaluation team for coding and analysis.

Fourth we will collect qualitative evaluation information from trainers in all states, half way through the project (March, 2000) through the use in-depth interviews or focus groups depending upon the ability to bring the volunteers to a central location in their state or not. This first set of data will provide preliminary recommendations for improvements in the second half of the project. If travel is involved, we will send focus group moderators to each state. If other means are used, we anticipate "focus groups through conference calls" with no more than six trainers in each conference call session. This is not ideal and will take great expertise on the part of the moderator in order to make sure all trainers become involved in the focus group.

Fifth, we will collect qualitative evaluation information from learners in all states, using focus group techniques, near the end of the project. Information obtained will inform both process and learning objectives though the use of retrospective and forward thinking techniques. This part of the evaluation will be dependent on the ability to follow-up with participant learners.

Sixth, we will collect quantitative information from learners, at the end of year 1, in the form of a survey (mail or phone, to be determined) in order to inform both process and learning objective outcomes. This survey will be developed in conjunction with HCFA and REES and should take no more than 10 minutes to fill out. If qualitative focus groups can not be conducted with learners (see above) we will include some open-ended questions in this survey instrument, making it both quantitative and qualitative

All of the above information will be entered into a database that will follow trainers and learners through time. No individual will be identified by name, only by number. We anticipate using uni-variate and bi-variate statistical techniques, including simple frequencies and cross-tabulations. Further, we can conduct bi-variate tests of association between characteristics of the program and learning outcomes, for example. A fairly new tool to help understand and utilize qualitative data, "In-vivo" will also be used. We will also synthesize case by case analyses into "best practice" guidelines.

Ultimately, we should be able to inform "best practice" training by:

- 1. Identifying whether trainer expectations and perceptions were met or confirmed, and, if not, why not;
- 2. Identifying steps that were taken through time to remedy problems encountered and identify ideas generated to improve the training program in the future. These steps are anticipated to include both facilitation skills by trainers, as well as technical problems encountered;
- 3. Identifying training approaches that worked, and why;
- 4. Identifying a cadre of successful techniques that trainers can utilize in a variety of learning situations; and

5. Providing information concerning technical

*Total, other expenses* **Total** 

\$4,225 **\$46,000** 

#### **Budget Narrative**

Personnel: Dr. Kolodinsky will commit 10% effort to the project. Ellen Rowe will commit 8% effort to the project. The Data management and evaluation research assistant will commit 50% effort to the project.

Travel: Travel comprises a substantial portion of the budget. The initial focus groups with trainees, given the time crunch of the August workshops, will require that 2 persons from the evaluation team be at the workshop site for one of the workshop days. One of these, Dr. Kolodinsky, will attend the entire workshop. Given the short notice, these tickets must be full price.

It will be necessary that the evaluator travel to each

# Appendix B Evaluation Procedures

The evaluation of the TTIS project was based on the seven research objectives outlined in the original grant proposal (Appendix A). Evaluation methods were adjusted based on participant and learner response and constraints that arose as the project unfolded. The evaluation methods included a variety of quantitative and qualitative assessment tools, including focus group questionnaires and a pre and post test, that involved both the trainers and learners. These tools were designed to inform "best practices" in conducting TTIS workshops and learning objective outcomes as stated in the grant proposal. All survey instruments were pre-tested by both trainers and project managers. Data collected was compiled in a manner to track both individual state team and group progress in conducting workshops and track the learning objectives of the learners. Quantitative data was compiled and aggregated in descriptive form using the SPSS statistical program. Qualitative data was analyzed using N-Vivo, a program designed to organize and analyze the content of qualitative material.

First, the evaluators developed a qualitative focus questionnaire (Appendix C) to provide baseline information from project volunteers concerning their initial perceptions of the project. Two focus group sessions were conducted at the National Training in Maryland in August 1999. Following the National Training conference, the evaluators established three different listserves, a public (for use of the entire group), a teen, and an adult listserve. The listserves were established for evaluation purposes for the collection of qualitative data and to facilitate communication among the state teams, the evaluators, and the project coordinators. Specifically, qualitative information extracted from the listserves allowed the evaluators to track team progress for case by case analysis. They were also used for conducting on-line focus groups, given the constraints in periodically gathering the state teams together for a face to face focus group.

In September 1999, the evaluators developed quantitative evaluation tools (Appendix D-F), in the form of a pre (an intake form) and post test (workshop evaluation form), to document the characteristics of the learners and collect information on process and learning objectives of the learners before and after the workshop. These evaluation tools were reviewed and revised by both trainers and project managers. Final documents were mailed to each state team, along with an instruction sheet, and a postage paid, pre-addressed envelope for the return of these materials to the evaluators. Based on the suggestion of an adult team leader, the evaluators put the evaluation form on-line, so learners who were comfortable with using their skills could practice them by locating and completing the workshop evaluation on-line. The on-line evaluation forms were received through the months of September and October, the evaluators followed up with the teams to ensure that they were successfully utilizing the intake and evaluation forms. However, for reasons discussed in the following section, these forms were not effectively used by the state teams in order to collect sufficient data. Thus, the quantitative analysis will be supported by qualitative analysis.

In November 1999, the evaluators developed a "Mid Year State Report" for both the teens and adults (Appendix G and H), in order to qualitatively assess their experience of the project process, including workshop preparation and conducting the workshops. The respective survey was

## Appendix C

## Teens Teach Internet Skills Training Workshop Focus Guide

August 5, 1999

Names of participants (12 persons):

#### Identifying initial perceptions of need, goals, objectives, and participants

- 1. Why did you get involved in this program?
- 2. Do you feel there is a need for this program?
- 3. What are your goals/objectives for this program?
- 4. What are your fears and expectations of this program?
- 5. What do you think are the goals/objectives of the elders and care givers (learners) whom you will train? Why would they seek training and get involved in the program?
- 6. What level of skill do you think the learners of the program will have?

#### Initial game plan

- 7. How do you plan to get this program started when you return home?
- 8. Who will be your community partners?
- 9. Where will the workshops take place? Do

# Appendix D

# Instruction Sheet: Intake and Evaluation Forms

<u>Intake form</u>: please hand out the "Intake" form at the beginning of the workshop after your introduction on what they are going to learn that day. Please collect this form before you begin the workshop and immediately put it in the envelope addressed to the Center for Rural Studies.

Please explain to the participants that the purpose of the form is:

- To get an idea of their access and use of computers and the Internet;
- To get an idea of areas they are interested in learning at the workshop.
- •

website and technology after a longer period of time following the workshop. Stress that their <u>name and phone number will be kept strictly confidential</u> and will <u>not be given out or used for</u> <u>anything besides long-term evaluation</u> of the workshop.

<u>Hard copy evaluations</u>: We would like you to encourage the seniors to fill out the evaluation online. However if they are extremely uncomfortable in doing so, we have included a hard copy of the evaluation for them to fill out.

<u>What to do with the completed forms (hard copy only)</u>: after you collect the forms, please immediately put them into the stamped enveloped addressed to the Center for Rural Studies. Please do not leave them out as the participants may feel that someone other than the evaluators could read their responses. It is important that we ensure confidentiality in all areas of evaluation for both trainers and participants. Please mail them after every workshop so we may keep on top of the forms as they are filled out.

# Appendix E

# Internet Skills ~ Medicare Workshop ~ Intake Form

Please fill out this brief questionnaire so that we may get an idea of your access and usage of computers and the Internet and areas you are interested in learning at this workshop today. All responses will be kept confidential. Thank you for your participation at this workshop.

- 1. Name:\_\_\_\_\_
- 2. Telephone:
   3. E-mail address:

For questions 4 and 5, *please check all that apply*.

	Family	Neighbor/					
At	member's	friend's	Public	Senior		No	
home	home	home	library	Center	Other	access	

4.

10.	l am comfortable using the Internet	1	2	3	4	5	9
11.	l am skilled at using the Internet	1	2	3	4	5	9

12. From the following list, please check off the computer and Internet skills:

Skill	Currently use	Would like to improve my skills	Not aware of this tool	Not interested
Searching on the Internet				
Searching the Medicare website				
E-mail				
Word processing (e.g. writing letters, journals, etc.)				
Spreadsheets (e.g. making a database or a budget)				
Other:				

13. I came to this workshop to: (check all that apply)

benefit myself

benefit someone else (spouse, parent, grandparent, etc.)

14. What are your goals for attending this workshop? (*Check all that apply*)

To learn specifically how to:	To increase my comfort level with computers
œ Search the Medicare website	To increase my skill level with computers
$\infty$ Use the Internet in general	To meet new people

œ Do word processing

œ E-mail

To learn how to use the Medicare website

To better inform myself about Medicare

17.	Gender:	Male	Female
-----	---------	------	--------

18. In what type of community do you live: Rural Suburban Urban

19. In what state do you live:\_\_\_\_\_

Thank you for your participation and attendance at this workshop!

## Appendix F

# Internet Skills ~ Medicare On-line Workshop ~ Evaluation

We are asking you to complete this form to enable us to improve the quality of our workshops for future participants. The body of the research gathered from this questionnaire will help us to develop the content and delivery of workshops to meet the needs of others. All responses will be kept confidential. Thank you for your participation.

1.	Name:	(l <i>a</i> st)	(first)	(MI)	
2.	Telephon	e:		3. E-mail address:	
Sta	ate:				

On a scale of 1-5, please indicate your level of agreement with the following statements:

After this workshop...

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Sure
I am more comfortable with using computers.	1	2	3	4	5	9
My skills with using computers have improved.	1	2	3	4	5	9
l am more comfortable with using the Internet.	1	2	3	4	5	9
My skills with using the <b>Internet</b> have improved.	1	2	3	4	5	9
I am comfortable searching the Medicare website.	1	2	3	4	5	9

Did you find the workshop helpful in that you were able to...

	Workshop did not go
No	over this.

- 9. Conduct a search on the Medicare website?
- 10. Find how many Medicare HMO's are available in your area?

Yes

- 11. Compare the benefits of two or more Medicare HMO programs available in your area?
- 13. Do you plan to search the Medicare website for information in the future? Yes No

## The following questions pertain to today's workshop and the trainers.

- 14. What was the most helpful part of the workshop?
- 15. Was there anything you expected that was not presented?

#### On a scale of 1-5, please indicate your level of agreement with the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Sure
16. The trainer proceeded at an acceptable pace for me.	1	2	3	4	5	9
17. The trainer spoke loud and clear.	1	2	3	4	5	9
18. I was able to understand the language that the trainer used.	1	2	3	4	5	9

19. I received enough individual attention

to meet my specific computer training 02 Tc 4.48h2t my specific comtrainieo 366.18 Tm()Tj/TT0 1 Tf-0.o2.379473 2

# Appendix G

#### Mid Year State Report ~ Adult Questionnaire

Please complete this questionnaire to the best of your ability. This information will be used to establish a log of progress for this pilot project, documenting methods you used and lessons learned from your TTIS experience. <u>Please attach via email or mail any reports, forms/fliers/handouts</u> that you think would compliment your responses below. *Thank you!* 

Name(s):\_\_\_\_\_

State (subgroup within state, if applicable):\_\_\_\_\_

Please fill out this information about your previous workshops (please use back side of p3 if needed)

Date of previous workshops	Approximate attendance	Who participated? (i.e. senior, care giver, etc.)	Use of intake form	Use of evaluation form
			~Yes ~No	~Yes ~No ~onlineversion?
			~Yes ~No	~Yes ~No ~onlineversion?
			~Yes ~No	~Yes ~No ~onlineversion?
			~Yes ~No	~Yes ~No ~onlineversion?

<u>Using the guidelines given below</u>, please briefly <u>describe the steps you took in putting together</u> <u>a workshop</u>. Please add any steps not mentioned in the "other" space. <u>Please state</u>: 1) who was primarily responsible for each step (teens, adults, both), 2) rough estimate of amount of time spent on activity (days, weeks, etc), and 3) any difficulties at each step and ways you overcame that difficulty (this response could be included in the "lessons learned" question).

#### Workshop preparation

- 1. How were teens trained to be workshop trainers (i.e. materials used, how you identified/recruited teens in your community, number attending training, how many actually participated in workshops)?
- 2. How did you obtain resources for your workshops (i.e. funding, "in-kind" resources such as products and services made available to you at no cost)?
- 3. How did you locate or obtain use of a suitable location/computer facility with an adequate amount of computers with access to the Internet?

- 4. How did you advertise for your workshops and/or recruit seniors (i.e. how did you target your intended audience)? \* please email or mail any fliers, etc.
- 5. Did you form any partnership with a senior/community organization for either workshop assistance or to recruit seniors? If so, which one? How did you go about doing this?
- 6. How did you assist teens in preparing for your workshop (i.e. handouts/ visual materials, checking computers/equipment to ensure they are working properly, etc.)?
- 7. Please describe any "lessons learned" in your preparation experience. Do you plan to do anything different in preparing for future workshops?

Other comments regarding workshop preparation (please use back side of p.3 if needed):

#### Workshop evaluation

- 1. What strategies did you advise the teens on to help participants overcome their fears/intimidation in working with computers (mice, keyboard, etc)? Surfing the Medicare website?
- 2. What strategies did you advise the teens on for dealing with differing technological skill levels among the participants?
- 3. What obstacles or hindrances did you encounter in conducting your workshop (i.e. time constraints, not enough trainers/computers available or other equipment, etc.)?
- 4. Please describe any lessons learned in conducting your workshop. Do you plan to do anything different in future workshops?
- 5. Did you/the teens offer for the seniors to fill the workshops evaluation out on-line? If so, what was their general response in doing this? Did they require much assistance from the teens? What type of assistance (i.e. understanding the questions, filling out the form on-line, etc)?

Other comments regarding conducting a workshop (please use back side of this page if needed):

- 5. Did you form any partnership with a senior/community organization for either workshop assistance or to recruit seniors? If so, which one? How did you go about doing this?
- 6. How did you prepare for your workshop (i.e. handouts/ visual materials, checking computers/equipment to ensure they are working properly, etc.)?
- 7. Please describe any "lessons learned" in your preparation experience. Do you plan to do anything different in preparing for future workshops?

Other comments regarding workshop preparation:

#### **Experience in Conducting a Workshop**

8. What strategies did you use to help participants overcome their fears/intimidation in

- a) working with computers (mice, keyboard, etc) and b) surfing the Medicare website?
- 9. What strategies did you use for dealing with differing technological skill levels among the participants?
- 10. What obstacles or hindrances did you encounter in conducting your workshop (i.e. time constraints, not enough trainers/computers available or other equipment, etc.)?
- 11. Please describe any lessons learned in conducting your workshop. Do you plan to do anything different in future workshops?
- 12. Did you offer for the seniors to fill the workshops evaluation out on-line? If so, what was their general response in doing this? Did they require much assistance from the teens? What type of assistance (i.e. understanding the questions, filling out the form on-line, etc)?

Other comments regarding conducting a workshop:

# Appendix I

# **End of Year Teen Report**

<u>Please complete and return your questionnaire by July 7, 2000</u>. Return it to Michele Cranwell at the Center for Rural Studies using the pre-addressed, postage-paid envelope enclosed, or by email to <u>mcranwel@zoo.uvm.edu</u> (you may attach any word processing file, preferably Word or WordPerfect, or paste it in a text message). For your convenience, this questionnaire is also available online at <u>http://crs.uvm.edu/medicare/teens.htm</u>. If you have any questions about this questionnaire, please email Michele Cranwell or call directly at (802) 656-0256.



Please describe in what way your involvement in TTIS has helped you professionally (i.e. skill building, led to other opportunities, etc.)

We would like to assess changes in your skills because of your participation in the TTIS project. On a scale from 1 to 10, where 1 = not at all improved, 5 = moderately improved, and 10 = extremely improved, please indicate the extent you feel the following skills have improved because of your participation in TTIS.

Improved	Not a	t all i	mprov	ved	Ι	Modera	tely Im	prove	d	Ex	tremel	y
Recruiting teen	S		1	2	3	4	5	6	7	8	9	10
Training teens			1	2	3	4	5	6	7	8	9	10
Recruiting Seni	ors		1	2	3	4	5	6	7	8	9	10
Preparing for a	works	hop	1	2	3	4	5	6	7	8	9	10
Developing a c	urricul	um	1	2	3	4	5	6	7	8	9	10
Teaching skills	i		1	2	3	4	5	6	7	8	9	10
Working with S	Senior	Citize	ens1	2	3	4	5	6	7	8	9	10
Working with o	other 4	-H te	ens1	2	3	4	5	6	7	8	9	10
Leadership skil	ls	1	2	3	4	5	3 06	7	8	93	.15 TD	(Improved )TjETEMC /

Please discuss other skills or knowledge you have *developed* or *improved* because of your participation in TTIS.

The following questions assess your attitude towards working with Senior Citizens, before and after your participation in the TTIS project.

## Before participating in TTIS...

On the scale given from 1 to 10, please rate your opinion on the following statements before your participation in TTIS.

My comfort level in working	Ver	y unc	comfc	rtable	9					Ver	y com	fortable
with Senior Citizens		1	2	3	4	4	5	6	7	8	9	10
Senior citizens' willingness to	Not willing at all									Very	willing	
try new things		1	2	3	4	4	5	6	7	8	9	10
Senior Citizens' ability to learn										ableto		
new things	lear	n nev	v thin	gs						lea	rn nev	v things
		1	2	3	4	4	5	6	7	8	9	10
Senior Citizens' openness to new	Not	at all	oper	١							Ve	ry open
technology	to technology to technolog							nology				
	1	2	3		4	5	6	7	8	9	) 1	0

# After participating in TTIS...

On the scale from 1 to 10, please rate your opinion on the following statements after participating in TTIS.

My comfort level in working	Very uncomfortable Very comfortable											
with Senior Citizens		1	2	3	4		5	6	7	8	9	10
Senior Citizens' willingness to	Not willing at all Very				willing							
try new things		1	2	3	4		5	6	7	8	9	10
Senior Citizens' ability to learn	Not able to Very able to				ableto							
new things	learn new things learn new things					v things						
		1	2	3	4		5	6	7	8	9	10
Senior Citizens' openness to new	v Notatallopen Very			ry open								
technology	to technology to technolog					nology						
	1	2	Э	} _	ŀ	5	6	7	8	9	) 1	0

Please write any other comments on the back side of this sheet.

Thank you for completing this survey! Have a great summer!

Evaluation Services • The Center for Rural Studies • 207 Morrill Hall • The University of Vermont Burlington, Vermont 05405• (802) 656-3021 • Fax (802) 656-4975 •

# Appendix J

## Workshop Participant Follow-up Telephone Interview Guide

Intro:

[Hello, may I speak with \_\_\_\_\_\_. Hello, this is Michele Cranwell. I am calling from the Center for Rural Studies to follow up with you on the computer and Internet workshop you attended on \_\_\_\_\_\_taught by 4-H teenagers. I would like to ask you some questions about your computer and Internet use since you have attended this workshop. Do you have about ten minutes to answer some questions?]

[Is there a better time I could call back?]

[Thank you for agreeing to answer some follow-up question to the computer and Internet workshop. All of your responses will be kept strictly confidential. (all results will be analyzed First I'd like to ask you about your access to computers, the Internet, and the Medicare website since you have attended this workshop.]

Since your attendance at the TTIS workshop...

Have been able to access a computer? Y/N

Have you been able to access the Internet? Y/N

[Skip to "Benefit of Workshop" section if no to previous 2 questions] Where is this Internet access? At home (1), family member's home (2), neighbor/friend's home (3), public library (4), senior center (5), local school computer lab (6), Exte

## access (9).

Have you been able to locate the Medi

What type of information were you looking for on the Medicare website?

Were you able to find this information? Y/N

Do you feel you use computers more often after attending the workshop? Y/N

If yes, how often do you use a computer? 9 NR

		A few times a		A few times a	
Daily	Once a week,	month	Once a month	year	Rarely
1	2	3	4	5	6

Do you feel you use the Internet more often after attending the workshop? Y/N

## If yes, how often do you use the Internet? 9 NR

		A few times a		A few times a	
Daily	Once a week,	month	Once a month	year	Rarely
1	2	3	4	5	6

## Benefit of the Workshop

[Now I would like to assess how you feel you have benefited from attending this workshop.]

On the following scale from 1-5, how satisfied are you with the workshop you attended?

Would you say you are...

Completely disat	Somewhat disat	Neither dis nor sat	Somewhat satis	Completely satis
1	2	3	4	5

[The following questions assess your attitude towards working with teens, before and after attending the workshop.]

## Before attending the workshop...

On the scale given from 1 to 10, please rate your opinion on the following statements before attending the workshop.

My comfort level in working	Very uncomfortable Very comfortabl					fortable				
with teens	1	2	3	4	5	6	7	8	9	10
Teens' respect for Senior	Not resp	at all					V	ery re	spectful	
Citizens	1	2	3	4	5	6	7	8	9	10
Teens' ability to teach Senior	Not able	eto							Very	ableto
Citizens	teach at	all								teach
	1	2	3	4	5	6	7	8	9	10
Teens' patience with Senior	Not patient at all								Very	patient
Citizens	1	2	3	4	5	6	7	8	9	10

# After attending the workshop...

On the scale from 1 to 10, please rate your opinion on the following statements after attending the workshop.

Is there anything else you would like to add about your experience in working with the teen trainers?

[Here are some questions relating to your comfort and skill level in using computers and the Internet since you have attended this workshop.]

On a scale of 1-5, please indicate your level of agreement with the following statements:

Since you have attended this workshop...

Strongly	Disagree	Neutral	Agree	Strongly	Not
Disagree				Agree	Sure

For questions or additional copies of this report, please contact:

Michele Cranwell Schmidt Program Evaluation Coordinator The Center for Rural Studies 207 Morrill Hall The University of Vermont Burlington, Vermont 05405 802-656-3021 Michele.schmidt @uvm.edu http://crs.uvm.edu/evaluation



The Teens Teaching Internet Skills (TTIS) Project is a national initiative involving youth and adults from the 4-H Technology Teams in six states, including: Connecticut, Florida, Iowa, Maryland, Virginia, and Washington. This Evaluation was sponsored by the U.S. Department of Agriculture 4-H Youth Technology Leadership Team and the Health Care Financing Administration.