



**PEN**

# **Program Evaluation Network User's Guide**

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## 1.0 Introduction

Extension educators often ask for a program planning and evaluation tool that will help them to:

- be accountable for their programs
- demonstrate the impacts of their programs and
- pinpoint improvements in their programs.

The Program Evaluation Network (PEN) is the tool for which Extension educators have waited! This User Guide provides all the background information you need to put PEN to work for you!

PEN is a database that offers validated response scales measuring outcomes targeted for Extension programs. PEN assists in creating tested survey instruments, analyzing and storing data so that the process of planning and evaluating programs and writing impact statements is streamlined. PEN was built based on the previous logic developed for the Tennessee 4-H Life Skills Evaluation System.

PEN features:

- validated instruments offered for short-term, intermediate and long-term outcomes.
- the opportunity to create an instrument specific to your program by selecting families (or topics) of questions within one or more knowledge areas.
- validated instruments pilot-tested with groups that represent Tennessee's diverse population.

## 2.0 Purposes

The most important purpose of PEN is to increase the effectiveness of program planning and evaluation by improving Extension programs (program development). Other purposes are to:

- Evaluate the learning, actions and conditions that occur in the lives of clientele through Extension program participation (professionalism).
- Contribute to the knowledge base and provide Extension professionals tools to assist in dossier preparation for promotion (scholarship).
- Provide program impacts to our funding partners and legislators based on statistically validated assessments (accountability).

## 3.0 Exploring Mandates

PEN helps Extension to satisfy four mandates.

### **3.1 Mandate for Program Development**

Extension program development models begin with an assessment of the problem and end with an assessment of the program. Extension professionals and their advisory groups need accurate assessments so that they can effectively assess, plan and conduct programs. As Extension professionals manage programs and program resources (time, money, volunteers, etc.), we need a sound assessment to assist in making decisions. Is our time better spent on program A or program B? History tells us that programs must change over time, consistent with the public's need. However, we must create better programs that positively change people or circumstances, not just different programs.

### **3.2 Mandate for Professionalism**

The desire to know "Are we making an impact, and how can we improve our program?" is a professional virtue. A quantitative evaluation, such as the one employed by PEN, is the most typical research design for measuring program effects (Herman, Morris and Fitz-Gibbon, 1987).

To what extent are our programs successful? Extension professionals have an obligation as people of character and public servants to provide answers to this question. When Extension stakeholders speak – whether a county Extension advisory committee or a state legislative committee – the Extension professional listens, acts and reports. This is the act of being professional – in every sense of the word – as we serve people.

### **3.3 Mandate for Scholarship**

We have an obligation to make a contribution to the education/learning knowledge base. In recent years, appeals have been made for higher education to more fully recognize Extension scholarship and for the Extension professional to accept the scholarship challenge (Norman, 2001). The evaluation methods outlined by Diem (2002) are included on the Tennessee Extension Individual Action Agenda. Our Extension programs are exceptional and serve society in many useful ways, but our programs are not completed until they have been evaluated. By analyzing and reporting results, we improve our own programs and those of others. We share what works. Future efforts are more efficient and effective because time and effort are expended on tested methods rather than untested ones. Improving our scholarship and applying the knowledge gained improves our service to people.

### **3.4 Mandate for Accountability**

Extension has program planning and evaluation requirements in three different pieces of federal legislation: the Smith-Lever Act of 1914, as amended; Government Performance and Results Act (GPRA) of 1993; and the Agricultural Research, Extension and Education Reform Act of 1998.

The GPRA mandates that all federally funded entities conduct evaluations to gauge the value of their programs and that all government agencies have a strategic plan. As the demands for accountability have increased (Radhakrishna and Martin, 1999), our accountability measures must reflect the trust placed in us by our federal, state, county and private stakeholders.

## **4.0 Important Questions & Answers about PEN**

### **4.1 What Are the Goals of This Project?**

- 1) Evaluate the learning, actions and conditions that occur in the lives of people through their participation in Extension programs.
- 2) Make more informed decisions for effective program planning and evaluation.
- 3) Improve our programs.
- 4) Provide more accurate assessments to our funding partners and legislators.
- 5) Provide Extension professionals evaluation tools to demonstrate program impact in promotion dossiers.

### **4.2 Is This Research or Evaluation?**

This is an important question. Any research that uses human subjects or collects data from humans is regulated by Code of Federal Regulations for the Protection of Human Subjects (45 CFR 46). At the University of Tennessee, the Institutional Review Board (IRB) enforces the federal code.

PEN was created for program evaluation. As discussed earlier in the section on mandates, Extension is expected to evaluate its programs. As long as the primary purpose of our evaluation efforts is to improve our programs and report the success of our programs internally, our efforts would not be considered “research” and they would not come under purview of the University of Tennessee Institutional Review Board (IRB) for the Use of Human Subjects in research.

If the purpose of our evaluation efforts is to share new knowledge outside of the Extension reporting system, or if our efforts are completed as part of a research grant specifically funded to conduct social science research and to share the new knowledge gained from that research, these projects would have to be reviewed by the University IRB before we could complete them, and all policies related to the use of human subjects in research would apply to these projects.

PEN has been designed for internal evaluation purposes and therefore it is not under the purview of the University of Tennessee IRB. However, if you wish to share the results of your evaluation efforts externally (for example, a paper at a regional or national conference, a journal article, a newspaper article, etc.), you must submit an IRB Form A, “Certification for Exemption from IRB Review for Research Involving Human Subjects,” and receive approval prior to sharing your results. Form A is the name of the form used for research projects that do not require the full review of the IRB.

### **4.3 What Is the Purpose of the Form A for External Reporting?**

Once PEN data have been collected, they are the confidential property of the University of Tennessee Extension. If you wish to use the data to report research findings to an external audience, you must obtain approval to conduct

research on these “secondary data” by filing a Form A protocol with the University IRB system. Submit your Form A to the Department of Extension Evaluation and Staff Development, 212-D Morgan Hall, 2621 Morgan Circle, Knoxville, TN 37996. As long as the researchers are accessing “secondary data” that do not have any human subject identifiers in them, the research would be approved for publication in any venue the researchers would wish to report it.

#### 4.4 What Is External and Internal Reporting?

| <b>Internal Reporting = Evaluation</b><br><i>no approved Form A required</i>   | <b>External Reporting = Research approved</b><br><i>Form A required before proceeding</i>   |
|--|---|
| <i>Reports (oral or written) to:</i> <ul style="list-style-type: none"> <li>• Advisory committee</li> <li>• County agriculture committee</li> <li>• Reports to county government officials</li> </ul> <i>Organizational Reporting:</i> <ul style="list-style-type: none"> <li>• Impact statements in the Extension reporting system</li> <li>• Promotion dossier impacts</li> <li>• UT/TSU administration</li> <li>• Extension newsletters (i.e., volunteer leader newsletter)</li> <li>• Annual Accomplishment Report and Plan of Work submitted to USDA</li> </ul> | <ul style="list-style-type: none"> <li>• Newspaper</li> <li>• Magazine</li> <li>• Journal (i.e., Journal of Extension)</li> <li>• Professional presentations, posters, papers, etc. (i.e., NAE4-HA, NACAA, NEAFCS, ESP, etc.)</li> <li>• A report to any person or group not listed under “internal reporting”</li> </ul> |

When it comes to your local newspaper, there’s no problem reporting the outputs from your programming, such as the number of participants, the number of field days held, the number and type of demonstrations given, etc. Examples:

- 18 Example County youth competed on the 4-H land judging team.
- “The best thing about soil testing is making decisions based on science,” said Example Landowner.
- The individuals receiving recognition for their top 10 scores included.....
- The Example County FCE Council won the following regional and state awards.....

However, before reporting results from PEN instruments, you must submit Form A and receive approval. Examples of statements based on the decision-making survey include:

- 50 percent of 700 youth surveyed indicated they now prioritize choices before making decisions.
- 100 percent (n=1512) reported they have learned to consider the truthfulness of sources before making a decision.

These statements cannot be reported externally without submitting a Form A and receiving approval.

#### 4.5 Why Isn’t ‘What We’ve Always Done’ Acceptable?

Simply stated, the answer is because times have changed. Demands have changed. Society has become more sophisticated. Our response must become more sophisticated as well. We live in an age of accountability. Inquiring minds want to know if our educational programs are achieving intended results. Are we making a measurable difference in the lives of our clientele?

#### 4.6 Why Are We Measuring Short-term, Intermediate and Long-term Outcomes?

Resources, activities, participation and reactions are important indicators of program performance, but not the most important. For example, if only activities and participation are measured, then we never fully describe the benefits of our programs. Examples of how some of these would be measured are shown:

- Resources
  - » Amount of money raised
  - » Number of volunteer hours expended
- Activities
  - » Number of sessions conducted
- Participation
  - » Number of clubs, participants, etc.
- Reactions

- » What did you think about the program?
- » What did you like best about today's program?

We are measuring short-term, intermediate and long-term outcomes because those are the results stakeholders are demanding.

#### **4.7 How Do We Measure Improvements in Learning, Actions and Conditions?**

With PEN, we are measuring outcomes. In evaluating Extension programs, we typically describe these outcomes as:

- short-term (often referred to as KASA for knowledge, attitudes, skills and aspirations)
- intermediate (behaviors or practices)
- long-term (social, economic or environmental conditions)

Consider these example reports:

In Example County, four out of every 10 high school students (40 percent) are obese. 4-H obesity prevention programs targeted middle school students. Program objectives were to increase student physical activity and to improve student dietary choices. Of the 250 middle school youth in the 4-H health program:

- Short-term:** 210 (85 percent) increased their knowledge of proper diet and practices supporting a healthy lifestyle, including reading food labels to make healthier choices and the importance of getting at least 30 minutes of daily physical activity.
- Intermediate:** 150 (60 percent) have increased weekly exercise from 30 to 90 minutes, a 66 percent increase in exercise time.
- Long-term:** After four years, school nurses with the Example County Department of Education reported that the obesity rate for Example County high school students was reduced from 40 percent to 20 percent.

#### **4.8 Why Don't We Ask Open-ended Questions?**

An open-ended question is one that is asked but no choices are given for the answer. Although much can be learned through open-ended questions in interviews, focus groups and surveys, we simply do not have the time, money or staff to collect and aggregate that much qualitative data.

You have the ability to add open-ended questions to the survey you create. You might consider adding, "If there is anything else you would like to tell us about this program, please write it on the back." Salant and Dillman (1994) describe closed-ended questions with ordered answers as being much easier for the respondent to answer, easier to code and easier to analyze than other types of questions.

#### **4.9 What about Literacy Levels?**

The goal was to construct and validate surveys that would be no higher than a 6th grade reading level. The FOG Index (Gunning, 1968) or Fleisch-Kincaid index was used to measure reading level. These indexes use the number of words, sentences, number of words with three or more syllables and the average number of words per sentence to show the number of years of formal education needed to read the entire survey with ease. What about instruments in a language other than English? Contact the subject matter specialist if a translation is needed.

#### **4.10 What about Audiences Who Need Even Lower Literacy Levels?**

The first thing to remember is that we should not attempt to evaluate every task, individual or group contacted. With this in mind, if you must use PEN to obtain data from an audience with low literacy skills, here are some practical suggestions:

Depending on the audience and their literacy level, you might be able to change a five-part response scale to a three-part scale as shown:

| Because of my experiences in this program...                               | Never                    | Rarely                   | Some-times               | Often                    | Always                   |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| When I make a decision, I think about what a person of character would do. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| Because of my experiences in this program...                               | Never                    | Some-times               | Always                   |
|--|--------------------------|--------------------------|--------------------------|
| When I make a decision, I think about what a person of character would do. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

If your audience has difficulty reading the survey, consider another evaluation technique. For example: interview the participants, ask the questions and let the participants raise their hands to answer, ask their parents to complete a survey, or ask their teachers or caregivers to complete a survey.

#### **4.11 Are These Instruments Valid and Reliable?**

Reliability and validity were established using standard procedures. As new instruments are developed, this same procedure will be followed:

Step 1. Outcomes were defined to represent the most updated research and practice.

Step 2. Instruments were adapted or created to reflect the outcomes.

Step 3. The instruments and outcomes were reviewed for face and content validity by an expert panel. Face validity describes how well the printed survey will evaluate the program. Content validity describes the truthfulness of the questions. A key question in evaluating content validity was “Do the questions measure the outcomes stated?” Suggested changes were made based on the feedback received.

Step 4. The instrument was pilot-tested by Extension educators with at least 100 program participants.

Step 5. Pilot data were analyzed, partially by using Cronbach’s Alpha. Any items with a Cronbach’s coefficient below 0.70 were eliminated from the scale to ensure internal consistency.

#### **4.12 Why Are We Using Questionnaires Anyway?**

Salant and Dillman (1994) list principles that make questionnaires an effective means of collecting program impact data, including:

- ability to collect information quickly and easily from a sufficiently large sample size.
- everyone who was served in the program has an equal opportunity of being selected for the questionnaire evaluation.

## **5.0 The Instruments (surveys)**

### **5.1 Levels**

Instruments were generally created or adapted for three outcome levels.

- 1) Short-term measures knowledge, attitudes, skills and aspirations after an Extension program. These changes may be measured just after an Extension program, or typically up to three months after the program.
- 2) Intermediate measures practices or behavior changes typically three months to one year after an Extension program.
- 3) Long-term refers to social, economic or environmental conditions. These typically take many years to achieve and measure, although some can be measured from one to five years after the program was implemented.

### **5.2 Type (Pre-Test, Post-Test and Follow-Up)**

Questionnaires created in PEN have a type, a description of how the instrument is administered. The type is pre-test, post-test or follow-up. Pre-test is a questionnaire administered to participants before the Extension program. Post-test is administered just after the program. Indicate post-test in cases where a post-test only design is used. Follow-up refers to a survey administered at least three months after the Extension program.

### **5.3 Use Caution and Professional Disposition when Adding Questions**

PEN provides the opportunity to add up to three questions to each instrument if you choose to do so. Caution and good judgment must be used. Appropriate questions to add are in regard to program implementation rather than program content, such as:

- What meeting location would you prefer for Extension programs similar to the one you just completed?
- What meeting time would be most convenient for you?

Questions should NEVER be added about illegal behavior or something quite personal. Such a question could cause harm to the participant. It could be grounds for litigation. For the protection of our organization, our institution and most importantly those we serve, it is suggested that questions only be added cautiously. Examples of *inappropriate questions for youth* follow.

**Never ask** “How often do you engage in promiscuous behavior?” or any other questions about personal sexual behavior.

**Never ask** “How often do you smoke marijuana?” or other questions about illegal activity.

**Never ask** “Do you have a lot of friends?” or something quite personal.

#### **5.4 One Page**

It is recommended that questionnaires be no more than one page in length. Typically, this would mean selecting no more than two or three topics per questionnaire.

## **6.0 The Participants**

### **6.1 4-H Youth Development Age Guideline**

Tennessee 4-H only collects PEN data for 4-H youth in the 5th grade or above. Youth below this stage may not have the abstract thinking skills and literacy skills to accurately answer our questions.

### **6.2 4-H Youth Development Groups with Mixed Ages**

If a group is surveyed with a range of ages and some are below 5th grade, it is acceptable to survey the whole group. However, do not include data for those youth younger than 5th grade. Remove those questionnaires before aggregating data. It could be difficult for youth under 10 years old to accurately distinguish these scales.

### **6.3 Participation**

The participants’ completion or achievement on any of the scales must never have any influence on participation or participation in any university or Extension capacity. Participation is voluntary and participants who agree to complete a questionnaire may stop at any time. The agent or volunteer leader administering the questionnaires must explain this to the participants prior to administering the questionnaire.

## **7.0 The Process**

### **7.1 Program Length**

If the Extension program is shorter than 2-3 hours, it’s probably not worth the time for a written questionnaire (Barkman, 2002). Think program evaluation, not activity evaluation. One Master Gardener meeting is an activity. The outcomes of the entire Master Gardener program, the series of meetings and outcomes achieved from service, should be evaluated, and certainly participants are engaged for more than 2-3 hours. If you have questions about program length, please ask your state or regional program leader. We ought to evaluate our planned programs, meaning the results of our annual plans where we place 60 percent of our time.

### **7.2 Parental Notice for Minor Program Participants**

This notice is not required for program evaluation purposes. However, you should inform parents of your intentions to evaluate the program’s outcomes. Prominently place the parental notice so that parents will see it in the 4-H newsletter, program announcement, yearbook or sign-up desk. It is unlikely that you will receive questions about evaluation or the specific questionnaires. If you do, explain that the questionnaire results will be combined with others so that individuals cannot be identified.

A sample statement might read as follows:

*As a participant in the (name of the 4-H program) your child may be asked to help with the evaluation of the program. We often conduct an evaluation to tell us how well the program is developing life skills. Your child may be asked to complete a short questionnaire about what he/she learned or did as a result of the program. Sometimes we conduct a question-*



naire before the program begins and another after the program has ended to see what was learned. We have created the questionnaires so that it will take no more than 10 minutes to complete.

*This questionnaire is confidential, and your child's answers will never be identified. Participants are not required to participate in the evaluation. If you or your child does not wish to participate it will not affect participation in any programs of Tennessee State University or the University of Tennessee. Data collected from the questionnaires will be combined and may be used at a later date for research purposes as secondary data.*

*If you do not want your child to participate in the evaluation, just contact (county Extension staff member) at (phone) before (date). If you have any questions about the evaluation, please contact me.*

Extension professionals with questions about this process should contact Joseph Donaldson, State Extension Specialist, at 865-974-7245.

### **7.3 Getting Started Statement**

The most important thing when handing out questionnaires is not to lead your audience. Do not say things like, "We need your answers so the government will continue to fund our program." Do not assume that the program has made an impact by stating, "We all know this is a good program, now let's find out how good it is with these questionnaires." This should be a bias-free process.

Sample statements when evaluations are handed-out:

Example #1: "Some people gain new skills from this program; other people do not gain new skills. What is true for you? Please do not put your name on this questionnaire. Please answer each question honestly. If you do not understand or need help, please let me know, and I will help you. Your answers help us improve our programs."

Example #2: "UT and TSU Extension agents are asking for your help in evaluating this program. Please do not put your name on this questionnaire. Please answer each question honestly. If you do not understand or need help, please raise your hand and I will help you. Choose the best answer that comes closest to your actions, thoughts or feelings."

### **7.4 Reporting**

The PEN report will show percentages for each question by the response categories. You may then compose impact statements based on your results. See the sample impact statements that appear at the end of this guide.

### **7.5 Time between Pre and Post-questionnaire**

Many Extension educators conduct a questionnaire before and after their program and compare the results. How long can one wait between the pre-questionnaire and the post-questionnaire? There are no concrete guidelines, but special consideration is required for youth.

Maturation means the process of gaining maturity, and when surveying youth with a pre-questionnaire and post-questionnaire, this issue must be addressed. Are the changes in the young person from pre-questionnaire to post-questionnaire the result of your program or the result of the youth getting older? For this reason, it is recommended that pre and post-tests completed by youth are no more than six months apart. Of course, there will be perfectly good exceptions! One example is the market steer project which takes at least seven months from beginning to completion.

### **7.6 Random Sampling**

If your program has more than 100 persons, there is no need to survey every person. Instead, select a random sample. To be random, every person who participated in your program must have an equal chance of being selected to complete the questionnaire. For 4-H clubs, the best way is to conduct a random, stratified survey. First randomly select clubs and then survey all the students in the selected clubs. A suggested rule of thumb: if all 4-H clubs received the same program, sample every member in 20 percent of those clubs.

### **7.7 Getting the Questionnaires Completed**

There's a host of strategies for getting the surveys completed. Extension educators do not have to administer the surveys themselves. Volunteer leaders could be trained to administer the questionnaires. Remember, no matter how talented or resourceful a volunteer, they will benefit from training before doing something for the first time. So offer ample training. Make sure that the teacher or volunteer leader has a copy of the "Getting Started Statement."

## **7.8 Confidentiality**

Never mention individual students or their results from the questionnaire. All paper questionnaires should be destroyed after data entry into PEN.

## **8.0 Research Notes**

### **8.1 Citation**

The appropriate citation for PEN is:

Donaldson, J.L. (2006). Program Evaluation Network (version 1.0) [Computer software]. Knoxville, TN: University of Tennessee Extension.

The citation for this user guide is:

Donaldson, J.L. (2007). Program evaluation network user guide. Knoxville, TN: University of Tennessee Extension.

### **8.2 Program Evaluation vs. Research**

The data collected is the property of University of Tennessee Extension. The purpose is for internal evaluation, such as completing the required annual impact statements or completing your dossier. However, because of the rigor used in questionnaire design and validation, this system can be used for research (such as work shared at state and national professional meetings and scholarly journals) if prior approval is granted for external reporting of the data by the UT Institutional Review Board. If you wish to report the data outside of Extension, you must submit Form A to the Institutional Review Board of the University of Tennessee for approval. The following are considered examples of when one must submit Form A: Journal of Extension article, poster or seminar for a professional conference, or even submitting a newspaper article to your local paper.

Submit the completed Form A to the Department of Extension Evaluation and Staff Development. Extension agents and specialists may contact the department at 865-974-7245 for more information.

The Extension IRB will review your Form A request and if appropriate, grant you permission to use the data. At this point, you may begin researching the data. One researches the data owned by UT Extension, not the participants. This is an important distinction to remember and articulate with anyone who inquires about whether it is research or evaluation.

## **9.0 Using PEN**

### **9.1 Accessing PEN**

Tennessee SUPER users access PEN from their dashboard. PEN is on the submenu next to Activity (Figure 1). Click Program Evaluation Network. All other users access PEN via this URL:

<http://pen.tennessee.edu>

If you are not able to access PEN, contact Extension Evaluation and Staff Development (865-974-7245) so that your account may be established.

Plans **Delivery** Profile Training/Registration Enrollment Operation Reports

Activity Program Evaluation Network

### My Programs

|                        | Program                             | Activities               | Outcomes            | Impact Notes        | Impact Statement     | Days This Month | Days T     |
|------------------------|-------------------------------------|--------------------------|---------------------|---------------------|----------------------|-----------------|------------|
| Individual Annual Plan | 4-H Civic Engagement                | <a href="#">View/Add</a> | <a href="#">Add</a> | <a href="#">Add</a> | <a href="#">Edit</a> |                 | 1          |
| Base Program(s)        | 4-H Youth Development (40 %)        | <a href="#">View/Add</a> | <a href="#">Add</a> | <a href="#">Add</a> | <a href="#">Edit</a> |                 | 0.4        |
|                        | Executive/Administrative (20 %)     | <a href="#">View/Add</a> | <a href="#">Add</a> | <a href="#">Add</a> | <a href="#">Edit</a> |                 | 0.5        |
|                        | Family and Consumer Sciences (40 %) | <a href="#">View/Add</a> | <a href="#">Add</a> | <a href="#">Add</a> | <a href="#">Edit</a> |                 | 0.8        |
| <b>TOTAL:</b>          |                                     |                          |                     |                     |                      |                 | <b>2.7</b> |

Select Program Year:

Figure 1. Click Program Evaluation Network

The PEN main page is displayed. The main page may contain timely announcements about PEN (Figure 2). SUPER users will note that PEN opens in a new window.

UT Extension

**PEN**  
Program Evaluation Network

Main Surveys Reports

Dear Colleagues, Welcome to the Program Evaluation Network (PEN). PEN allows you to create questionnaires that measure the outcomes of our statewide Extension programs. PEN accom... replace the current Tennessee 4-H Life Skills Evaluation System. I am confident that you will find PEN to be an effective and user-friendly tool. All of the instruments found on PEN will be val... providing leadership for this software development project, in addition to his other duties. PEN is a significant development for UT Extension with far-reaching impacts for the Cooperative Ex... agents and specialists. PEN may be used by out-of-state Extension personnel. Beginning this year, Martha Keel will coordinate PEN participation of Extension personnel in Alabama, Florida, ... Carolina as part of a Regional Children's Environmental Health Program. Please do not use PEN until further notice. Testing will continue for the next few months, and efforts are underway to... available later this year. Thank you. Sincerely, H. Charles Goan Interim Dean

Program Evaluation Network, © 2007, The University of Tennessee Extension

Figure 2. PEN home

### 9.2 Creating Surveys

The PEN menu has three parts: main, surveys and reports. Click surveys to create a survey or access surveys created previously. Until you create a survey, PEN displays a "No Surveys" notice (Figure 3).

UT Extension

**PEN**  
Program Evaluation Network

Main **Surveys** Reports

### My Surveys

Status:

**No Surveys**

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Figure 3. Surveys page

Click the orange “Add” button to add a survey. PEN displays the new survey page (Figure 4). Type a descriptive name for your survey. This is the name that will be placed at the top of your survey. Next, indicate the type of survey. Type is pre-test, post-test or follow-up. Pre-test is a questionnaire administered to participants before the Extension program. Post-test is administered just after the program. Indicate post-test in cases where a post-test only design is used. Follow-up refers to a survey administered at least three months after the Extension program.

#### 4-H Community Service Project

The screenshot shows a web form titled "Survey Data" for a survey with ID 13. The form fields are as follows:

- Name:** 4-H Community Service Project
- Type:** Post-Test (dropdown menu)
- Main instructions (Optional):** Think about your experiences. For each sentence, please place an "X" in the box to show the answer that fits best.
- Demographic Question Prompt (Optional):** Because we want programs to reach as many as possible, will you please mark one or more boxes to describe yourself?
- Extra Question #1 (Optional):** What is the best meeting time for you?
- Extra Question #2 (Optional):** (Empty text box)
- Extra Question #3 (Optional):** (Empty text box)
- Active:** True (dropdown menu)

At the bottom of the form are three buttons: Save, Cancel, and Delete.

Figure 4. Creating a New Survey

The main instructions and demographic question prompts are displayed. These may be changed, although changes are not recommended for most surveys because surveys were designed with these prompts in mind. Next, you may add one to three extra questions if needed. Scales are not displayed with these questions, so it is recommended that these questions be open-ended. PEN also includes a status for all surveys. When you create a survey, it remains active. If you no longer want to see the survey, simply change the active status to false (Figure 4).

Notice the triangle beside the base programs (Figure 5). Click the triangle to reveal the knowledge areas defined for that program. Notice the clear and black triangles. Black triangles contain topics, and clear triangles indicate that topics are not yet defined in PEN. Clicking the triangle next to the topic reveals the questions for that topic. You are selecting the entire topic, or a family of questions, for your survey. Click the checkbox beside the topic to select it for your survey. Notice Figure 5, in which the Master Gardener topic is selected.

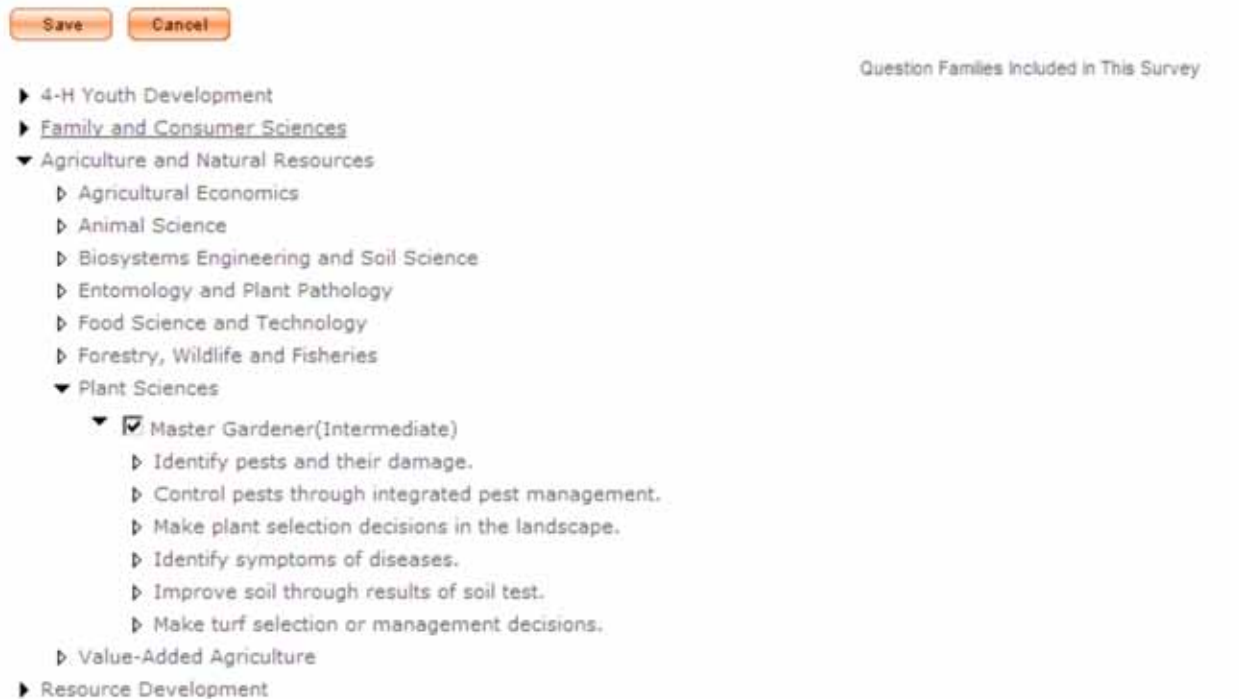


Figure 5. Selecting the Master Gardener Topic (Question Families)

Notice that PEN allows you to select multiple topics for a single survey. Figure 6 shows a survey being created with both the Achieving Goals and Lead-Based Paint topics.

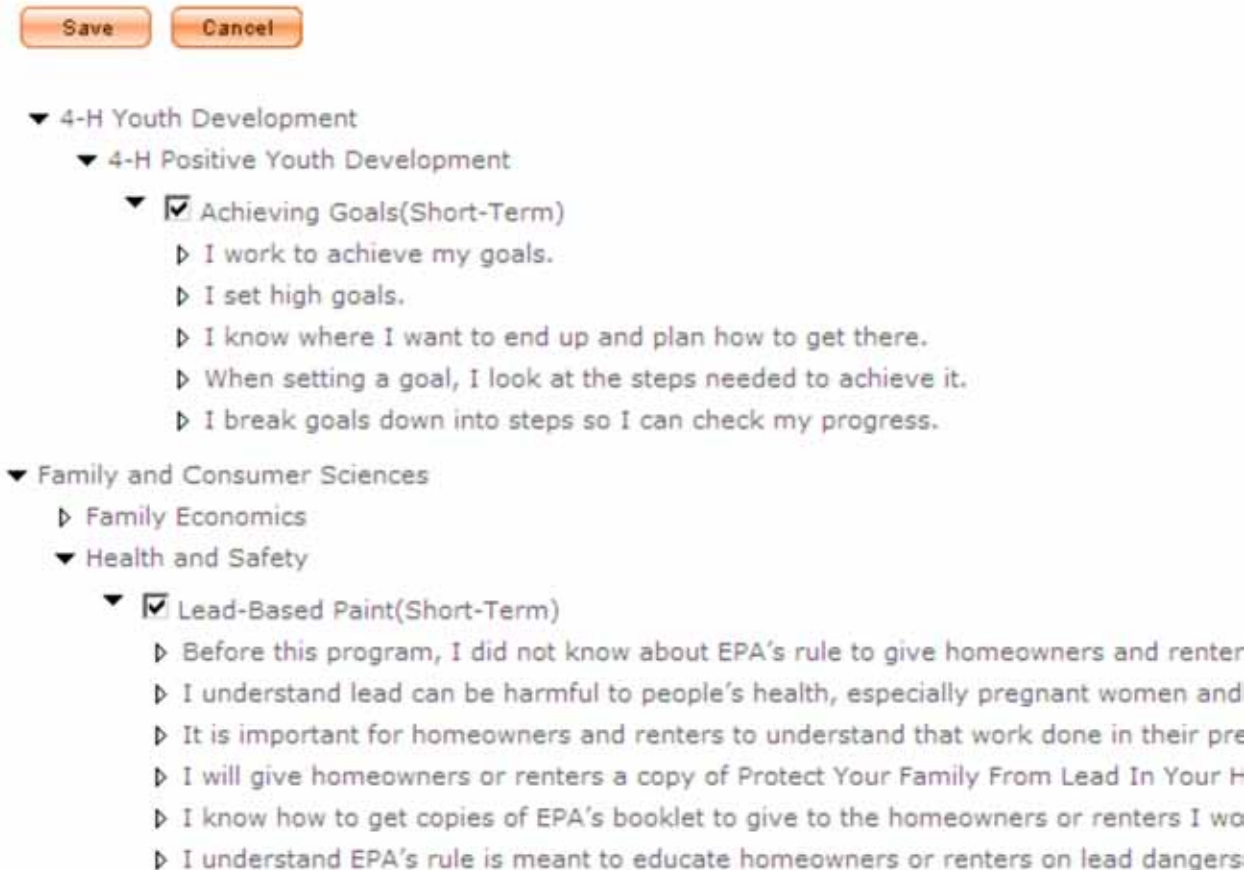


Figure 6. Selecting Multiple Topics (Question Families)

Click save to build and save the survey. Notice that the surveys page is displayed (Figure 7) with the name of the survey.



Figure 7. Surveys page

### 9.3 View Survey

Click view to see and print the survey (Figure 8).



## 4-H Community Service Project

Achieving Goals  
Lead-Based Paint

Think about your experiences. For each sentence, please place an "X" in the box to show the answer that fits best.

| Because of my 4-H experiences...   | Never                    | Rarely                   | Sometimes                 | Often                    | Always                   |
|--|--------------------------|--------------------------|---------------------------|--------------------------|--------------------------|
| 1) I work to achieve my goals.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/> |
| 2) I set high goals.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/> |
| 3) I know where I want to end up and plan how to get there.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/> |
| 4) When setting a goal, I look at the steps needed to achieve it.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/> |
| 5) I break goals down into steps so I can check my progress.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/> |
| All information will remain anonymous and confidential.  | Strongly Disagree        | Disagree                 | Neither Agree or Disagree | Agree                    | Strongly Agree           |
| 6) Before this program, I did not know about EPA's rule to give homeowners and renters the booklet Protect Your Family From Lead In Your Home before working on their pre-1978 home.         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/> |
| 7) I understand lead can be harmful to people's health, especially pregnant women and children under the age of 6.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/> |
| 8) It is important for homeowners and renters to understand that work done in their pre-1978 home could disturb lead in or around their pre-1978 home could expose them to lead-based paint. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/> |
| 9) I will give homeowners or renters a copy of Protect Your Family From Lead In Your Home before I begin my work on their pre-1978 home.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/> |
| 10) I know how to get copies of EPA's booklet to give to the homeowners or renters I work for.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/> |
| 11) I understand EPA's rule is meant to educate homeowners or renters on lead dangers and how to avoid contact with lead.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/> |

12) What is the best meeting time for you?

**THANK YOU!**

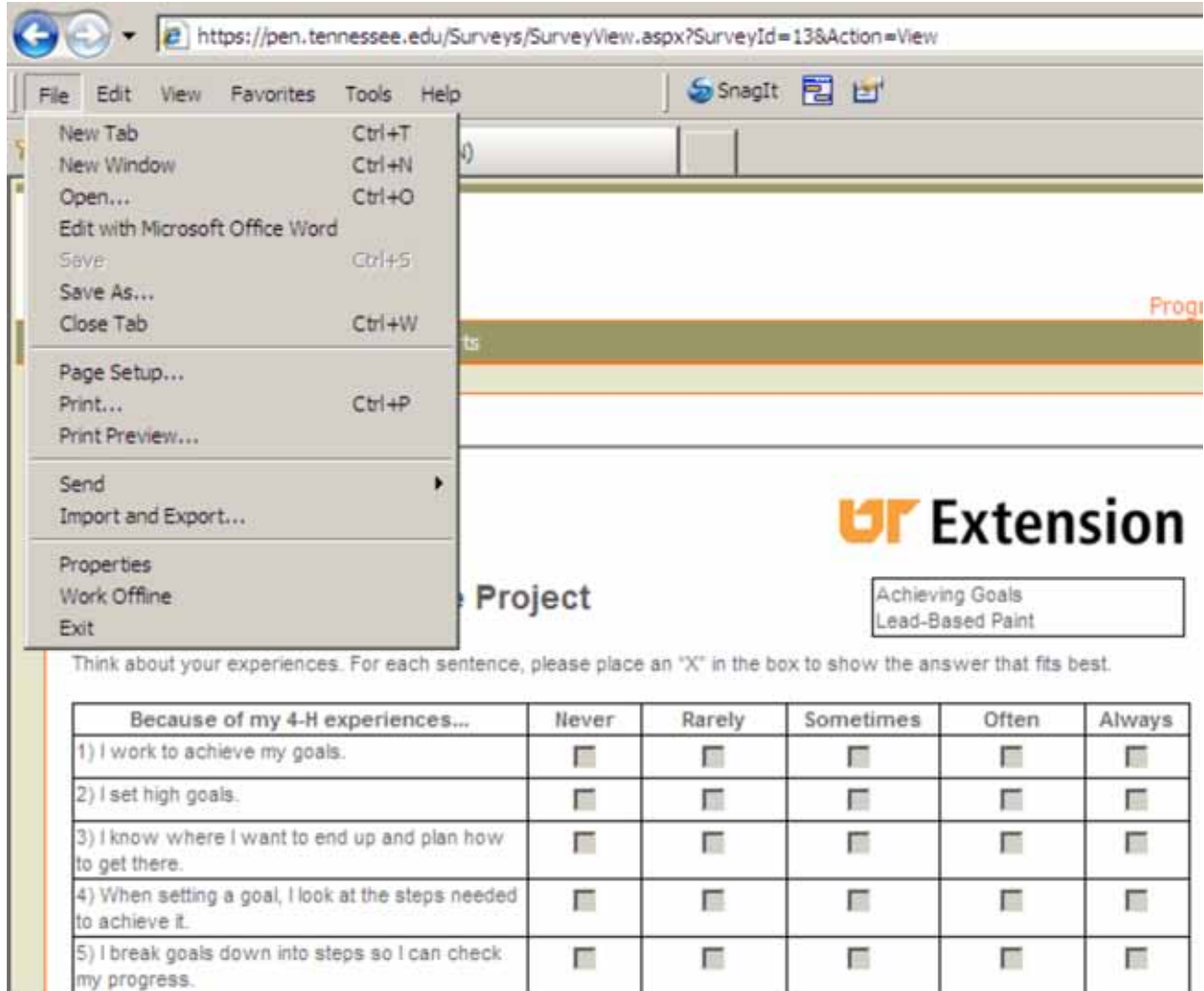
Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development. University of Tennessee Institute of Agriculture, US Department of Agriculture and county governments cooperating. UT Extension provides equal opportunities in programs and employment.

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Figure 8. View

## 9.4 Print

Click print to view the survey as it will appear when printed. To print the survey, click file and then print (Figure 9).



The screenshot shows a web browser window with the address bar displaying <https://pen.tennessee.edu/Surveys/SurveyView.aspx?SurveyId=13&Action=View>. The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The File menu is open, showing options such as New Tab, New Window, Open..., Edit with Microsoft Office Word, Save, Save As..., Close Tab, Page Setup..., Print..., Print Preview..., Send, Import and Export..., Properties, Work Offline, and Exit. The Print... option is highlighted. The background of the browser shows a survey page with the University of Tennessee Extension logo and the text "Project". Below the logo, there is a box containing the text "Achieving Goals Lead-Based Paint".

Think about your experiences. For each sentence, please place an "X" in the box to show the answer that fits best.

| Because of my 4-H experiences...                                  | Never                    | Rarely                   | Sometimes                | Often                    | Always                   |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1) I work to achieve my goals.                                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2) I set high goals.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3) I know where I want to end up and plan how to get there.       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4) When setting a goal, I look at the steps needed to achieve it. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5) I break goals down into steps so I can check my progress.      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Figure 9. Print

When the survey is printed, make copies for your participants. After the data is collected, count and record responses. Now you are ready to enter the survey data.



### 9.5 Enter Data

Click enter data. Once you have entered the data, click submit (Figure 10).



### 4-H Community Service Project

Achieving Goals  
Lead-Based Paint

Think about your experiences. For each sentence, please place an "X" in the box to show the answer that fits best.

| Because of my 4-H experiences...   | Never             | Rarely   | Sometimes                 | Often | Always         | No Response |
|--|-------------------|----------|---------------------------|-------|----------------|-------------|
| 1) I work to achieve my goals.   | 10                | 10       | 10                        | 10    | 10             |             |
| 2) I set high goals.   | 1                 | 5        | 10                        | 24    | 10             |             |
| 3) I know where I want to end up and plan how to get there.  |                   |          |                           | 10    | 40             |             |
| 4) When setting a goal, I look at the steps needed to achieve it.  | 1                 | 2        | 10                        | 10    | 27             |             |
| 5) I break goals down into steps so I can check my progress.   |                   |          |                           |       | 48             | 2           |
| All information will remain anonymous and confidential.  | Strongly Disagree | Disagree | Neither Agree or Disagree | Agree | Strongly Agree | No Response |
| 6) Before this program, I did not know about EPA's rule to give homeowners and renters the booklet Protect Your Family From Lead in Your Home before working on their pre-1978 home.         |                   |          | 30                        | 10    | 10             |             |
| 7) I understand lead can be harmful to people's health, especially pregnant women and children under the age of 6.   | 0                 | 5        | 5                         | 10    | 30             |             |
| 8) It is important for homeowners and renters to understand that work done in their pre-1978 home could disturb lead in or around their pre-1978 home could expose them to lead-based paint. | 5                 | 2        | 10                        | 0     | 33             |             |
| 9) I will give homeowners or renters a copy of Protect Your Family From Lead in Your Home before I begin my work on their pre-1978 home.   |                   |          |                           |       | 50             |             |
| 10) I know how to get copies of EPA's booklet to give to the homeowners or renters I work for.   |                   |          |                           | 6     | 40             | 4           |
| 11) I understand EPA's rule is meant to educate homeowners or renters on lead dangers and how to avoid contact with lead.  |                   |          | 20                        | 20    | 10             |             |

Figure 10. Enter Data

### 9.6 View Data

Click View Data to see all previous data entries for a survey. PEN records the date and time the data was entered (Figure 11).



Figure 11. View Data

Click the date/time stamp entry to view the data.

By clicking enter data for the same survey, a data entry screen appears to enter results of additional survey administrations. Again, PEN will record the date and time you entered the data.

### 9.7 Reports

PEN allows you to build reports for any given topic or time period (Figure 12). Click Reports in the navigation bar. Use the calendar icon to select dates for your report. Extension agents may build reports based on the data they have entered (“myself only”) and county directors may build reports for data entered by their entire unit (“my unit only”). Select the survey type and then check topic(s) for the report. Notice the search criteria in Figure 12 will return all Lead-Based Paint post-test survey results for the Extension agent from January 1, 2007 to December 31, 2007.

The screenshot shows the 'Topic Report' interface. At the top, there is a navigation bar with 'Main', 'Surveys', and 'Reports' tabs. The 'Reports' tab is active. Below the navigation bar, the title 'Topic Report' is displayed. The form contains the following elements:

- Date Range:** Two date input fields with calendar icons. The first field contains '1-Jan-2007' and the second contains '31-Dec-2007', separated by 'to'.
- Show Data Entered By:** A dropdown menu with 'Myself Only' selected.
- Survey Type:** A dropdown menu with 'Post-Test' selected.
- Submit:** An orange button with the text 'Submit'.
- Select topics for report:** A list of topics with expand/collapse arrows and checkboxes:
  - ▶ 4-H Youth Development
  - ▼ Family and Consumer Sciences
    - ▶ Family Economics
    - ▼ Health and Safety
      - ▶  Lead-Based Paint(Short-Term)
      - ▶ Human Development
      - ▶ Nutrition and Food Safety
  - ▶ Agriculture and Natural Resources
  - ▶ Resource Development
  - ▶ Children's Environmental Health

Figure 12. Criteria for Topic Report

Click submit to view the topic report. Notice that percentages and means are displayed for each question and a mean is displayed for the entire scale (Figure 13).

Topic Report

Close

Individual Report  
 From: 2007-1-1 Through 2007-12-31  
 User: extension2 extension2  
 Survey Type: Post-Test

Lead-Based Paint (Short-Term)  
 Total Surveyed: 50  
 Total Served: 250

| All information will remain anonymous and confidential.   | Strongly Disagree | Disagree   | Neither Agree or Disagree | Agree       | Strongly Agree | No Response | Average |
|---|-------------------|------------|---------------------------|-------------|----------------|-------------|---------|
| Before this program, I did not know about EPA's rule to give homeowners and renters the booklet Protect Your Family From Lead in Your Home before working on their pre-1978 home          | 0 (0.00%)         | 0 (0.00%)  | 30 (60.00%)               | 10 (20.00%) | 10 (20.00%)    | 0 (0.00%)   | 3.60    |
| I understand lead can be harmful to people's health, especially pregnant women and children under the age of 6  | 0 (0.00%)         | 5 (10.00%) | 5 (10.00%)                | 10 (20.00%) | 30 (60.00%)    | 0 (0.00%)   | 4.30    |
| It is important for homeowners and renters to understand that work done in their pre-1978 home could disturb lead in or around their pre-1978 home could expose them to lead-based paint. | 5 (10.00%)        | 2 (4.00%)  | 10 (20.00%)               | 0 (0.00%)   | 33 (66.00%)    | 0 (0.00%)   | 4.08    |
| I will give homeowners or renters a copy of Protect Your Family From Lead in Your Home before I begin my work on their pre-1978 home  | 0 (0.00%)         | 0 (0.00%)  | 0 (0.00%)                 | 0 (0.00%)   | 50 (100.00%)   | 0 (0.00%)   | 5.00    |
| I know how to get copies of EPA's booklet to give to the homeowners or renters I work for   | 0 (0.00%)         | 0 (0.00%)  | 0 (0.00%)                 | 6 (12.00%)  | 40 (80.00%)    | 4 (8.00%)   | 4.87    |
| I understand EPA's rule is meant to educate homeowners or renters on lead dangers and how to avoid contact with lead  | 0 (0.00%)         | 0 (0.00%)  | 0 (0.00%)                 | 10 (20.00%) | 40 (80.00%)    | 0 (0.00%)   | 4.80    |
| Average:  |                   |            |                           |             |                |             | 4.44    |

Figure 13. Topic Report

## 10.0 References

- Bailey, S.J. & Deen, M.Y. (2002, April). A framework for introducing program evaluation to extension faculty and staff. *Journal of Extension* [On-line], 40(2). Available at: <http://www.joe.org/joe/2002april/iw1.html>
- Barkman, S.J. (2002). A field guide to designing quantitative instruments to measure program impact. West Lafayette, Indiana: Purdue Extension.
- Barkman, S. J., Machtmes, K., Myers, H., Horton, R.L., and Hutchinson, S. (1999). Four-Fold Youth Development Model. 4-H Publication No. 895. West Lafayette, IN: Purdue University and The Ohio State University.
- Diem, K.G. (2002, Dec.). Using research methods to evaluate your extension program. *Journal of Extension* [On-line], 40(6). Available at: <http://www.joe.org/joe/2002december/a1.shtml>
- Diem, K.G. (2003, Feb.) Program development in a political world — It's all about impact. *Journal of Extension* [On-line], 41(1). Available at: <http://www.joe.org/joe/2003february/a6.shtml>
- Donaldson, J.L. (2004). A Roadmap for Documenting Impacts: Tennessee 4-H Life Skills Evaluation System User Guide. The University of Tennessee Extension.
- Gay, L.R. & Airasian, P. (2000). Educational research: Competencies for analysis and application (6th ed.). Upper Saddle River, NJ: Merrill.
- Gunning, R. (1968). The technique of clear writing. New York: McGraw-Hill.
- Herman, J.L., Morris, L.L. & Fitz-Gibbon (1987). Evaluator's handbook. Newbury Park, CA: Sage Publications.
- Howard, J.W, et al. (2001, Aug.). Developing a program evaluation instrument for Texas 4-H: A work in progress. *Journal of Extension* [On-line], 39(4). Available at: <http://www.joe.org/joe/2001august/iw4.html>
- Iowa State University Extension. (2003). Targeting life skills. Retrieved September 11, 2003 from the ISU Targeting Life Skills and Evaluation Web site: <http://www.extension.iastate.edu/4H/skls.eval.html>
- Mincemoyer, C.C. & Perkins, D.F. (2001, August). Building your youth development toolkit: A community youth development orientation for Pennsylvania 4-H/Youth Programs. *Journal of Extension* [On-line], 39(4). Available at: <http://www.joe.org/joe/2001august/a7.html>
- Montana State University (2003). Life skills evaluation. Retrieved September 11, 2003, from MSU Extension Web site: <http://www2.montana.edu/lifeskills>
- Norman, C.L. (2001, Feb.). The challenge of extension scholarship. *Journal of Extension* [On-line], 39(1). Available at: <http://www.joe.org/joe/2001february/comm1.php>
- Radhakrishna, R. & Martin, M. (1999, June). Program evaluation and accountability training needs of extension agents. *Journal of Extension* [On-line], 37(3). Available at: <http://www.joe.org/joe/1999june/rb1.htm>
- Salant, P. & Dillman, D.A. (1994). How to conduct your own questionnaire. New York: John Wiley & Sons, Inc.
- University of Illinois. (2003). Life skills evaluation system. Retrieved April 5, 2004 from the University of Illinois Extension Web site: <http://web.extension.uiuc.edu/lifeskills/viewlife.asp>
- Verma, S. & Burnett, M.F. (1996, Feb.). Cutting evaluation costs by reducing sample size. *Journal of Extension* [On-line], 34(1). Available at: <http://www.joe.org/joe/1996february/a2.html>
- Worthen, B.R., Sanders, J.R., & Fitzpatrick, J.L. (1997). Program evaluation: Alternative approaches and practical guidelines (2nd ed.). White Plains, NY: Longman.

## Appendix A

### Checklist for Using PEN

- Program being evaluated was a priority program, part of your 60 percent planned time or a base program evaluated for a specific purpose.
- If a pre-questionnaire, post-questionnaire design was used, the time between the two questionnaires was no more than six months for youth.
- “Get Started Statement” (or a similar non-biased statement) was read before questionnaires were completed.
- Questionnaires were completed by participants.
- Questionnaires were kept in the strictest confidence.
- Responses were totaled.
- Response totals for each question were entered in PEN.
- Impact statements written.
- Impact statements reported to appropriate stakeholders and reporting system.
- Questionnaires were destroyed.

## Appendix B

### Example Impact Statements

| Annual Impact Statement Report 1  |   |                           |                            |
|---|---|---------------------------|----------------------------|
| <b>Year:</b> 2007   |   |                           |                            |
| <b>Title:</b> Lead-Based Paint Education  |   |                           |                            |
| <b>Issue:</b> Example County families were at risk of lead poisoning from lead-based paint! Contractors, landlords and remodelers needed education about lead-based paint dangers and EPA rules. The Example County Health Council selected lead poisoning prevention education as one of their major community health projects for the year. |   |                           |                            |
| <b>What has been done:</b>  |   |                           |                            |
| Direct  |   | Number of Contact Methods | Number of Contacts Reached |
|   | Client visits to Extension office         | 68                        | 101                        |
|   | Direct Mail / telephone calls             | 36                        | 731                        |
|   | Group meetings / demonstrations           | 14                        | 1800                       |
|   | On-site visits (farm, home and workplace) | 28                        | 97                         |
|   | Subtotal:                                 | 146                       | 2729                       |
| Indirect  |   |                           |                            |
|   | Exhibit(s)                                | 2                         | 100                        |
|   | Newspaper article(s)                      | 1                         | 8000                       |
|   | Publication(s)                            | 2                         | 150                        |
|   | Radio program(s)                          | 3                         | 12000                      |
| Health Council members were involved in planning and creating a lead-based paint information exhibit that was displayed in a local paint store. These 15 leaders staffed the exhibit and invited painters, landlords and remodelers to various group meetings conducted by the Extension agent.   |   |                           |                            |

Annual Impact Statement Report 1

**Impact:**

Lead-Based Paint

Short-Term

- 20 of 50 now know about EPA's rule to inform homeowners and renters with the Protect Your Family from Lead booklet prior to working on their pre-1978 home.
- 20 of 50 now know that lead can be harmful to people's health, especially pregnant women and children under the age of 6.
- 20 of 50 homeowners and renters now know that work done on their pre-1978 home could disturb lead in or around the home and expose them to lead-based paint.
- 20 of 50 painters/remodelers will now provide homeowners and renters with the Protect Your Family from Lead booklet before working on their pre-1978 home.
- 20 of 50 painters/remodelers now know how to get copies of EPA's booklet to give to the homeowners or renters they work for.
- 20 of 50 painters/remodelers understand that EPA's rule is meant to educate homeowners and renters on lead dangers and how to avoid contact with lead.

In a recent newspaper article on renovation of older homes, a local real estate broker was quoted as saying, "This Extension program made a big difference in helping make painters and remodelers more aware, and our families are much safer now."

|                 |                               |
|-----------------|-------------------------------|
| <b>Contact:</b> |                               |
| Name            | extension2 user               |
| Unit            | Example                       |
| Address         | 1030A Cumberland Heights Road |
| City            | Clarksville                   |
| State           | Tennessee                     |
| Zip             | 37040-6901                    |

Annual Impact Statement Report 2

**Year:** 2008

**Title:** Consumer Horticulture in Example County

**Issue:** Consumer horticulture issues impact virtually all of the adult population of the state. To develop and maintain attractive landscapes and productive home gardens, consumers need knowledge and skills in proper fertilization, proper plant selection and proper planting techniques. Consumers need to know how to properly identify and effectively manage various lawn, ornamental, garden and household pests. Volunteers are needed to provide community garden and landscape programs that improve the quality of life.

This year marked the first year Example County has offered the Master Gardener program. The Example County agriculture committee identified Master Gardener as one of the four most important agriculture and natural resources programs for Extension to provide over the next five years.

**What has been done:**

Annual Impact Statement Report 2

| Direct        |   | Number of Contact Methods | Number of Contacts Reached |
|---------------|---|---------------------------|----------------------------|
|               | Client visits to Extension office         | 68                        | 101                        |
|               | Direct Mail / telephone calls             | 36                        | 731                        |
|               | Group meetings / demonstrations           | 14                        | 1800                       |
|               | On-site visits (farm, home and workplace) | 28                        | 97                         |
|               | Subtotal:                                 | 146                       | 2729                       |
| Indirect      |   |                           |                            |
|               | Exhibit(s)                                | 2                         | 100                        |
|               | Newspaper article(s)                      | 1                         | 8000                       |
|               | Publication(s)                            | 2                         | 150                        |
|               | Radio program(s)                          | 3                         | 12000                      |
|               | Subtotal:                                 | 9                         | 20250                      |
| <b>Total:</b> |   | 154                       | 21459                      |

**Impact:**

Master Gardener

Short-Term

- 25 Master Gardeners gained knowledge and confidence in entomology.
- 30 Master Gardeners gained knowledge and confidence in integrated pest management.
- 8 Master Gardeners gained knowledge and confidence in ornamentals.
- 28 Master Gardeners gained knowledge and confidence in plant diseases.
- 33 Master Gardeners gained knowledge and confidence in soils.
- 31 Master Gardeners gained knowledge and confidence in turfgrass.

50 Master Gardener interns were randomly selected and surveyed regarding their knowledge and confidence in performing six skills at the conclusion of the 2008 Master Gardener class. The outcomes above may be generalized to all 150 Master Gardener interns. Of the 150 Master Gardener interns in this year's class:

- 50 percent can identify pests and their damage.
- 60 percent can control pests through integrated pest management
- 16 percent can make plant decisions in the landscape.
- 56 percent can identify symptoms of diseases.
- 66 percent can improve soil through results of soil testing.
- 62 percent can make turf selection or turf management decisions.

|                 |                                |
|-----------------|--------------------------------|
| <b>Contact:</b> |                                |
| Name            | extension2 user                |
| Unit            | Example County                 |
| Address         | 3258 Highway 126,<br>Suite 104 |
| City            | Blountville                    |
| State           | Tennessee                      |
| Zip             | 37617                          |

Annual Impact Statement Report 3

**Year:** 2007

**Title:** 4-H Workforce Preparation

**Issue:** Preparing youth for the workforce is a major concern. According to data from the Business-Higher Education Forum and The Conference Board, Inc., employers are reporting young workers lack key skills and attributes necessary for success in today's workplace. This research also indicates companies are asking for young adults who have applied skills in communication, leadership, teamwork and problem solving. Due to the changing nature of the 21st century workplace, Tennessee youth need the skills, experience and confidence necessary to meet its demands and thrive in a high-performance economy characterized by high-skill, high-wage employment.

The SCANS Report (Secretary's Commission on Achieving Necessary Skills) identified key competencies employers want students to possess. After 15 years, this same report is still being used to identify employability skills. Tennessee 4-H Youth Development will foster the development of the skills and personal competencies identified by SCANS as needed for solid job performance through the life skills of achieving goals, communicating and ethical decision making.

The Example County 4-H Advisory Council identified achieving goals and communicating as the top two educational needs of youth aged 9-19 in the county.

**What has been done:**

| Direct   |   | Number of Contact Methods | Number of Contacts Reached |
|----------|---|---------------------------|----------------------------|
|          | Client visits to Extension office                                 | 40                        | 55                         |
|          | Direct Mail / Telephone Calls (this will include electronic mail) | 20                        | 1100                       |
|          | Group meetings / demonstrations                                   | 80                        | 2,162                      |
|          | On-site visits (farm, home and workplace)                         | 10                        | 12                         |
|          | Subtotal:   | 150                       | 3329                       |
| Indirect |   |                           |                            |
|          | Exhibit(s)  | 1                         | 200                        |
|          | Newspaper Article(s)  | 2                         | 8000                       |
|          | Publication(s)  | 3                         | 75                         |
|          | Radio Program(s)  | 1                         | 7000                       |
|          | Subtotal:   | 7                         | 15275                      |
| Total:   |   | 164                       | 18604                      |

All 4-H in-school and community club meetings this year focused building skills in communicating and achieving goals.

**Impact:**

Achieving Goals

Short-Term

- 140 youth now work to achieve their goals.
- 170 youth now set high goals.
- 95 youth now know where they want to end up and plan how to get there.
- 170 youth, when setting a goal, now look at the steps needed to achieve it.
- 180 youth now break down goals into steps so they can check their progress.

Communicating (Public Speaking)



Annual Impact Statement Report 3

Intermediate

- 99 youth can now show enthusiasm when giving a speech or presentation.
- 100 youth can give a 2-3 minute speech.
- 90 youth now have the confidence to speak in front of groups.
- 44 youth can give an informative speech or presentation.
- 110 youth now know how to organize the parts of a speech or presentation.

The results above were from a random sample of 200 youth surveyed. Of the 1,000 youth in this program, impacts included:

- 70 percent now work to achieve their goals.
- 85 percent now set high goals.
- 90 percent now break down goals into steps so they can check their progress.
- 55 percent now know how to organize the parts of a speech or presentation.
- 45 percent now have the confidence to speak in front of groups.

|                 |                                |
|-----------------|--------------------------------|
| <b>Contact:</b> |                                |
| Name            | extension2 user                |
| Unit            | Example County                 |
| Address         | 3258 Highway 126,<br>Suite 104 |
| City            | Blountville                    |
| State           | Tennessee                      |
| Zip             | 37617                          |

Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development. University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating. UT Extension provides equal opportunities in programs and employment.

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