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# *The Program Evaluation Toolbox*

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## Documenting Practice Change with Mailed Questionnaires

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Determining if an individual has implemented a new practice or changed their behavior as a result of an Extension program means that we must make a follow-up contact with that individual at some point in time after the conclusion of the program. We can make that contact through a personal visit to see what they have done. We can call them on the phone to ask about how their behavior has changed since participating in the program. Programs presented to groups that meet repeatedly over time allow for data collection to be done at subsequent meetings of the group. But one of the most cost-efficient methods of collecting information regarding practices and behaviors is use of a mailed questionnaire.

Obviously there are drawbacks to using mailed questionnaires. Not the least of which is the unfavorable public sentiment regarding surveys, polls, and questionnaires in general. Much of this public sentiment has been shaped by unscrupulous individuals who use survey questions to thinly veil a sales pitch. Damage is also done when the results of public opinion polls are distorted for political gain.

Research has repeatedly shown that the respondent's interest in the subject they are being asked about and the reputation of the organization sponsoring the survey are key factors in determining the response rate for a questionnaire. Both of these factors work in Extension's favor when we conduct follow-up surveys to determine the impact of our programs. Program participants who receive our questionnaires often know quite a bit about Extension and believe it to be a credible, unbiased information source. Many believe they received something of value by participating in the program being evaluated and want to tell you about it. Consequently, they are often more likely to complete and return your questionnaire than would a member of the general public asked to respond to a public opinion poll conducted by an organization they know nothing about.

But even with these factors working in our favor, we must guard against several other threats to the validity and reliability of our survey data. Fortunately, there are a few simple steps you can follow to ensure the highest quality data is produced by your survey efforts.

**1. Know how to contact the audience.** It may seem strange to even mention, but without the names and addresses of the people who participated in your program, it is impossible to conduct a survey. For many programs, you will have that information. But for others, you will need to make plans to get that information. Perhaps you can have program participants address an envelope to themselves at the final session of a series.

**2. To sample, or not to sample, that is the question.** As a general rule, if there are less than 100 participants in the program you are assessing, and you have the resources to do so, mail the questionnaire to all of the program participants. Sampling does not usually result in significant reduction of cost until the number of program participants exceeds 300. When it does, consult a resource person who can assist you in selecting the most appropriate sampling technique for your situation.

**3. Keep it confidential.** A key to getting valid information through a mailed questionnaire is to assure confidentiality or anonymity. But many people do not understand the difference in these two terms. A confidential survey is one where you know who submitted each questionnaire, but agree not to divulge the information provided by the respondent. With an anonymous survey you have no knowledge of who submitted each questionnaire. If you intend to send reminder cards to those who have not returned questionnaires by a particular date, you need to know who those people are. Consequently, confidential surveys are usually the way to go. To ensure confidentiality, you may wish to write a code number on each questionnaire and record the name of the person to which it was sent on a master list. Then record on the master list the date each questionnaire is returned. You can then send reminder cards or letters only to those individuals who have not returned questionnaires.

**4. Cover the bases with a cover letter.** A good cover letter is an important ally in generating a high response rate and ensuring that the questionnaire is completed and returned according to the procedures you specify. The cover letter should be a personal letter no longer than one page in length and be printed on Extension letterhead. It should describe the purpose of the study, the procedures for returning the questionnaire, and explain whether or not the survey is confidential or anonymous. Try to anticipate the questions a potential respondent might have and answer those in the cover letter. Also make sure that you let them know how they can contact you if they have questions.

**5. Question the Questions.** The only way to get quality data from respondents is to ask good questions. Carelessly worded or ambiguous questions frustrate respondents and threaten the validity of your data. This publication deals primarily with gathering data about *practices* and *behaviors* (or more precisely, their *beliefs* about their practices or behaviors.) The first step in developing questions is to identify the set of practices or behaviors that you would like for program participants to begin doing as a result of their participation in the program. The second step is to determine the best way to ask a question about those practices or behaviors. One option is to use a simple checklist. Checklists are best when there is little likelihood that the participant would have performed the behavior without having participated in the program. Even so, it is beneficial to state in the instructions that you are only interested in things done as a *direct result* of their participation in the program.

**Example 1.** Please place a checkmark next to each of the following things that you have done as a result of your participation in the pesticide applicator training.

- replaced worn spray nozzles
- checked equipment calibration
- began using cultural control methods



**8. A Gentle Nudge and a Swift Kick.** Time and time again, research has shown that the single most important factor in achieving a high response rate is the use of follow-up mailings. Plan to have a reminder post-card arrive in the hands of those who have not yet responded approximately 14 days after they received the first questionnaire. After the passage of another 14 days, send another questionnaire, cover letter, and self-addressed, stamped envelope to those who have still not returned a completed questionnaire. Be gentle and friendly in the first reminder and increasingly assertive in subsequent follow-ups. This procedure should result in about a 70 percent response rate.

**9. Data Reduction and Analysis.** So what does one do with the tall stack of questionnaires that are returned? Few stakeholders are interested in thumbing through each questionnaire to see what the respondents said. Instead, we usually provide stakeholders with descriptive statistics that provide a snapshot of the results.

In the first example above, it is usually sufficient to simply report the number and percent of individuals who indicated that they had begun performing each practice as a result of participating in the program. In the second example, you may wish to list the number and percent who performed each practice before the program *and* the number and percent who are now performing them (Add the numbers from both columns together to calculate the number and percent now performing the practice or behavior). In the third example, where responses are coded into numeric form, data are best summarized by calculating a *before* and *after* mean for each item and then subtracting the *before* mean from the *after* mean to arrive at the difference in mean scores.

But remember, the data you are summarizing was provided only by respondents to the your questionnaire. You are quite justified in claiming *credit* for changing the practices of those who responded. But what about those who failed to respond to your questionnaire? The best advice is to let stakeholders decide for themselves if they believe those who failed to respond acted in a manner similar to those who responded. In most cases, just present the data for those who responded.

But what if you only sent the questionnaire to a *sample* of those in the program? You will certainly want to claim that your program affected more than just that small sample of individuals. But doing so will involve the use of more sophisticated inferential statistics.

**10. Tell the Story.** Our job is not finished until we communicate the results of our evaluation efforts to relevant stakeholders. There are several mechanisms for doing so. One option is to incorporate the findings into the text of an impact statement you develop and submit. If the data produced fits under one of the Kentucky Cooperative Extension Service's priority indicators, report it there as well. Other options for sharing data are your county's Report to the People, an Extension Council, or a report back to participants in the program. You may also consider incorporating the results into a newspaper article, radio program, or newsletter.

## References

Mangione, T.W. (1998). Mail Surveys. In L.Bickman and D. Rog (Eds.) *Handbook of Applied Social Research Methods*. (pp. 399-427). Thousand Oaks, CA: Sage Publications.

Dillman, D.A. (1991). The Design and Administration of Mail Surveys. *Annual Review of Sociology*. 17:225-249.

Worthen, B. R., Sanders, J. R., and Fitzpatrick, J. L. (1997). *Program Evaluation: Alternative Approaches and Practical Guidelines*. New York: Longman Publishers.