Evaluating for Accountability
A Practical Guide for the Inexperienced Evaluator

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Evaluating for Accountability
A Practical Guide for the Inexperienced Evaluator

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She is a member of the American Evaluation Association and has presented papers at the Association's annual conferences.
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(continued)
The current emphasis on evaluation has led a lot of Extension workers to a "teachable moment". It has also sent a lot of writers into creative frenzies attempting to make the most of this moment.

Some writers focus on evaluation theory and/or program planning models. Others strive for a more practical approach. Some assume that readers will have a basic background or interest in research; others assume next to nothing in terms of staff interest and abilities.

To help you decide whether or not this particular publication is for you, take the simple test below. (Hint: there are no right or wrong answers.)

1. Which of the following responses best describes your feelings about program evaluation?
   a. I need to be convinced that program evaluation is worth my time and energy.
   b. I've accepted the fact that (like it or not) evaluation is part of my job.
   c. Tell me what to do so I can get on with it.

   If you answered (a), this publication is not for you. If you still need to be convinced about the value of evaluation, you'll need to consult another source. This handbook assumes that you are ready to tackle an evaluation or are ready to work up to tackling an evaluation. If you answered (b) or (c), go on to question 2.

2. If confronted by a research article in an academic journal, would you:
   a. Look for the "methodology" section.
   b. Look for the "summary" section.
   c. Look for the "sports" section.

   If you answered (a), this handbook is probably not for you. Most methodology fans have rather extensive research backgrounds. If you responded (b) or (c), you probably have limited experience and/or interest in research. Those who respond (a) will likely find the information here to be elementary, simplistic, and perhaps heretical. Those who respond (b) or (c) will more than likely find the information to be sensible, practical, and comforting. If you answered (b) or (c), continue with questions 3 and 4.
3. When presented with the prospect of using statistical formulas to analyze a pile of data, do you:
   a. Finish the task faster than a speeding bullet.
   b. Escape from the task faster than a speeding bullet.
   c. Prefer being hit by a speeding bullet.

4. What do the words "orthogonal rotation" mean to you?
   a. In factor analysis, a technique used to rotate the reference axes, maintaining right angles, as a means of interpreting the analysis.
   b. A technique used in planting crops to increase production.
   c. Something you'd probably rather not know about.

If you answered (a) to both of these items, you're beyond the scope of this handbook. We'll be approaching data analysis in simple terms, using only very basic math skills (numerical counts, percentages, etc.). These are quite respectable methods of handling data and can be used to accomplish the purposes of most evaluations. If you answered (b) or (c) to these items, go on to questions 5 and 6.

5. Which response comes closest to the way you would define "control group"?
   a. A SWAT team used in police emergencies.
   b. One means of collecting data in evaluation studies.
   c. Part of a classical design involving experimental and control groups, essential in the testing of educational programs.

6. Which of the following responses best describes your feelings about evaluation efforts:
   a. Anything worth doing is worth evaluating.
   b. Anything worth evaluating is worth evaluating well.
   c. Anything worth evaluating is worth evaluating rigorously.

If you responded (c) to one or both items, this publication is not going to change your mind. However, if you responded (a) or (b), you're likely to be receptive to the evaluation approach used in this handbook. We'll be dealing with what Frutchey (7) calls "do-it-yourself evaluation," as opposed to "Extension studies" or "experimental research" which require greater attention to sound principles of scientific procedure and use more complex analysis.
"Do-it-yourself evaluations" are not "quick and dirty". They are carefully planned and systematically done ("quick and clean"?), but rather small in scale and less rigorous, statistically speaking. If you're still with us, try question 7:

7. In learning more about evaluation, what is your top priority?

   a. The theoretical frameworks of various approaches to evaluation.
   b. How evaluation fits in various program planning models.
   c. Practical advice for evaluating Extension programs.

As you may have already guessed, the emphasis of this publication is on (c). Theoretical frameworks and program models are occasionally mentioned, but only when necessary or important for illustrating practical points. The intent is not to diminish the importance of such frameworks and models, but to bring into prominence the application of information which will do a job. There will be other opportunities for Extension staff to explore evaluation theory - here is an opportunity to make evaluation happen!

In other words, this handbook is intended to provide information to Extension staff who have been challenged to do program evaluation, but who are not experienced evaluators. The emphasis is on process and application, rather than theory and philosophy. It is not intended to make evaluation experts of all Extension professionals or qualify them to do rigorous research with sophisticated analysis. (While this type of research is desperately needed, it's best done by those who are experts in this area.)

The focus is on evaluating and reporting program results. Evaluation relating to "needs assessment", "personnel performance", or "policy" are not specifically addressed, although some of the content may apply.

While it is admirable to build evaluation in before a program is implemented, tying it to specifically stated measurable objectives or "success indicators", it should come as no surprise to you that this hasn't always happened. Yet staff are and have been involved in "successful" programs.

This handbook is designed for use with ongoing programs that may or may not have previously-identified measurable objectives. It does, however, require that you be able to describe what a program was intended to accomplish or what you think the program has accomplished.

The content focuses on the survey method of gathering data, with numerous examples of evaluation items. Although most of the examples have been drawn from the 4-H program, the ideas and concepts are also applicable to other program areas.
Although the tone may be light at times, the message is serious and the information is sound. The purpose will be to get people started in evaluation by building a successful "first-timer" experience. Evaluation is not easy, but it is not as difficult as some would have it seem.

Our aim is evaluation that stresses products rather than produces stress.

Barbara J. Sawyer  
Extension Specialist  
4-H and Youth Development  
Oregon State University
If one were to pick the issues in 4-H that lend themselves to popular debate - the things that seem to matter most, that quicken the heart, and develop enthusiasm; the subjects of this article would be dead last on the list. Evaluating, accounting, and reporting are not activities by choice. They are tasks that are required, assigned, and done out of necessity. Is it any wonder that 4-H professionals have failed to do an outstanding job in this area? Perhaps the point is a bit overstated, but even the optimist must admit that all is not well in this facet of the 4-H program. - Warren S. Mauk, in an article on 4-H Evaluation, Accountability, and Reporting (9)

INTRODUCTION

"Evaluation" and "accountability" have become buzz words (or battle cries, depending on your point of view) as Extension programs and personnel are increasingly scrutinized both inside and outside the organization. To help get a handle on this situation, let's briefly (and as painlessly as possible) consider:

- What is evaluation and why do we do it?
- How does accountability fit into evaluation?
- What direction are we going?

WHAT IS EVALUATION AND WHY DO WE DO IT?

Over the years many experienced educators have turned their thoughts to program evaluation. As a result, there is an abundance of definitions, each reflecting a particular perspective.

Nearly all, however, seem to agree on two common elements in program evaluation: using information (evidence) to determine the value or worth of a program (judgment). Most add a third component (criteria), suggesting that evidence and judgment must take into consideration the objectives, intentions, and/or expectations involved in program delivery and impact.
These same writers also identify many reasons for program evaluation, most of which seem to cluster in four areas, described here in terms of their application to Extension:

- **Program improvement** - To provide information for decisions concerning future programs (Should this program be continued, expanded, terminated? How could it be improved? What new programs should be added?).

- **Program accomplishments** - To determine program results (What impact did the program have on the participants? How did they react? What did they learn? What practices have they adopted or changed? What effects did the program have on communities?).

- **Program reports** - To provide information to key individuals or groups concerned with program effectiveness (such as Extension administrators, county commissioners, local advisory groups, support groups, voters).

- **Professional growth** - To build confidence and competence in Extension staff (by providing an opportunity to develop teamwork as staff work together; an index as to "how we are doing"; and a sense of accomplishment, satisfaction, and personal growth).

The concept of "accountability" is interwoven into aspects of all four areas, but perhaps relates most directly to program accomplishments and reports.

**HOW DOES ACCOUNTABILITY FIT INTO EVALUATION?**

Accountability means to be responsible. An early viewpoint held that accountability dealt mainly with the use of funds, staff, and property in prescribed ways. Accounting showed program supporters that their resources had been used as intended. Accountability was seen as good stewardship.

The basic idea is still with us. However, an additional dimension has developed. This relates to the 4-H mission - the extent to which stated goals or objectives are being met. In short, 4-H professionals are accountable for using support as intended and at the same time reaching agreed-to ends for which the means were provided. (9) We need to let our funding supporters know how we are spending their dollars. But we also need to let them know what they are getting in return - what happened to people, families, and communities as a result of their involvement in Extension programs.

Accountability, therefore, implies an external rather than an internal orientation - evaluation for others rather than evaluation for ourselves. It also implies that findings from such evaluation are reported to those to whom we are accountable.

In other words, evaluation can be considered as contributing to two overlapping organizational functions: program management, where the focus is on internal decision making; and accountability, where the focus is on external audiences. (10)
Both functions are important, but in tight economic times the emphasis shifts from program management to accountability. Publicly funded agencies not only have to account for their use of tax dollars, but for their relative share of the tax dollar pie. As the pie gets smaller, one good cause increasingly competes with another.

*History buffs and evaluation aficionados are referred to the capsule account on the following page.*)
In the early days of Extension, programs focused on convincing clientele to follow certain practices—planting hybrid corn, preserving food safely, etc. This was true for the youth program as well as the adult program. There were a lot of farm and home visits and personal contacts, and it was relatively easy to document whether or not recommendations were followed.

This orientation to programming led to the ideas of "innovators", "early adopters", etc., which became a focal point of program research in the 1950's, along with an explosion of interest in rural sociological topics. There were also some serious attempts to evaluate program results by using the "educational objective" approach which was fashionable in the formal school system.

Funds in those days tended to be distributed according to two major models: the charity model, where the criterion for evaluation was the sincerity of funders and program staff as they tried to help the "less fortunate"; and the pork barrel model, where the strength and leverage of the program's constituency was paramount and political power, not program results, was the critical issue.

After Sputnik in 1957, there was a growing criticism of American education—a fear that our schools weren't good enough (i.e., inferior to the Russians). This led to large sums of dollars being spent on educational programs, particularly in science. Some say that "evaluation research" was born to document the strength and leverage of the program's constituency was paramount and political power, not program results, was the critical issue.

After Sputnik in 1957, there was a growing criticism of American education—a fear that our schools weren't good enough (i.e., inferior to the Russians). This led to large sums of dollars being spent on educational programs, particularly in science. Some say that "evaluation research" was born to document the strength and leverage of the program's constituency was paramount and political power, not program results, was the critical issue.

Evaluation methodology, unfortunately, hasn't developed at the same rate as the need for evaluation. As an emerging specialty, evaluation borrowed methodology and personnel from other fields. From business case analysts and accountants armed with techniques tried on things— not people—and on quantitative goals rather than qualitative goals. From campuses came economists, political scientists, and psychologists, often with techniques for use in controlled research situations rather then in the real world.

Ten to fifteen years into "evaluation for accountability", organizations are still struggling with methodology. Extension is not alone—other areas such as health, law enforcement, and education—share the dilemma.

Complicating the issue is the fact that people at different levels of an organization have different ideas about what kind of evaluation is most useful. Rifts also exist between evaluation specialists (as professionally trained researchers) and other staff (more comfortable with less rigorous evaluation). Others are concerned about whether evaluation should be done by those within the organization or by external evaluators who are supposedly more objective.

The answer to all of the above seems to be "yes". We need evaluation for program improvement and evaluation for accountability, formal and informal; process and application, introspective analysis and outside examination. The tricky part will be to coordinate these elements to produce a total picture of an organization that gets results.

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WHERE ARE WE GOING?

Has Extension slighted its obligations in accountability? If so, why? Some interacting possibilities come to mind (9). To begin with, Extension has enjoyed the trust and popular support of many officials, public and private, who have in the past required minimal accountability. A second point developed in response to the first - since Extension was asked for minimal accounting, a minimal reporting system based on numbers (contacts, hours, and dollars), was set up. And finally, program evaluation produced limited information. Most efforts in 4-H evaluation show how resources were used (stewardship). Few efforts show what was accomplished (mission).

It seems, however, that things are changing. In response to growing demands for accountability, particularly on the federal level, there appears to be a marked shift in the priority assigned to evaluation activities within the Extension organization. The national Accountability/Evaluation system is under way, networks are springing forth for exchanging ideas and information about evaluation methods and techniques, and training sessions in evaluation are being scheduled for staff at all levels.

This handbook has been designed to provide information to Extension staff who have been challenged to do accountability evaluation, but who are not experienced evaluators. It is not intended to produce evaluation experts qualified to do rigorous research, but to make inexperienced staff more comfortable with relatively simple evaluation techniques.

On the following "evaluation continuum" (7), handbook content would be best described as dealing with "do-it-yourself" evaluation:

<table>
<thead>
<tr>
<th>Casually</th>
<th>Self-Checking</th>
<th>Do-It-Yourself</th>
<th>Extension</th>
<th>Experimental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everyday</td>
<td>Impressions</td>
<td>Exercises</td>
<td>Evaluations</td>
<td>Studies</td>
</tr>
</tbody>
</table>

a) Casual observations, speculations, based on impressions.
b) Analytical thinking based on casual observations.
c) Planning and applying evaluation principles, carefully planned and systematically done, usually rather small in scale.
d) More carefully designed, with greater attention to sound principles of scientific procedure and more complex analysis.
e) Involves complex problems and techniques to investigate specific causal or comparative effects.
As indicated in the preface, process and application, rather than theory and philosophy, is emphasized. The major focus is on evaluating the results of programs which may or may not have previously identified measurable objectives.

Content is discussed in seven parts, corresponding to the sequence of activities involved in planning and conducting a program evaluation using a survey approach to collect data from program participants:

- **Focusing the evaluation.** A workable plan begins with choices: What are you going to evaluate? Who will the evaluation be for? What do you want to find out? Included here are ideas and questions to consider when selecting a program, defining an audience, and determining the scope of your evaluation.

- **Planning the strategy.** Outlined in this section are issues to consider before you collect the data - the resources available to you, for example, and involving others in your evaluation efforts. A step-by-step Planning Checklist is included to help you schedule and record your evaluation activities.

- **Collecting the data.** The words "data collection" encompass a great deal of activity in evaluation. Discussed here are methods, techniques, and tools; writing questions; questionnaire format; pilot testing; cover letters and telephone introductions; selecting and training interviewers; and sampling procedures.

- **Analyzing the data.** Ways of analyzing data drawing on simple math techniques are described (no sophisticated statistical analysis here!). Also included are methods of coding and tabulating responses.

- **Interpreting the findings.** Without interpretation, data are just numbers. The evaluator's job is to provide an interpretive framework to give the numbers meaning. Strategies are outlined for examining the evidence from different angles and making judgments based on your observations.

- **Reporting the results.** Here's the payoff in evaluating for accountability purposes. The focus is on shaping your report to fit your audience - and getting the most possible mileage from your data.

- **Wrapping it up.** Final thoughts relating to disengaging from the evaluation and keeping things in perspective...

Unless you're a brand new Extension worker, you probably already have valuable experience that will help you carry out these activities. That experience may not be in evaluation, but in program planning, where the process is similar.

Program planning involves a needs assessment (focusing the evaluation), a plan (the strategy), program development (data collection), implementation (data analysis and interpretation), delivery (reporting the results), and follow-up (wrapping it up). Face your evaluation tasks with confidence, using your programming experience as a base!
FOCUSING THE EVALUATION

The first task in planning an evaluation is to bring into focus those nebulous ideas you probably have floating around in your head waiting for an evaluation to happen. The process of shaping these ideas into a workable plan involves three overlapping questions that sound easy, but which require considerable thought: What are you going to evaluate? Who is the evaluation for? What do you want to find out?

WHAT ARE YOU GOING TO EVALUATE?

During your Extension career you've likely spent a lot of overtime planning and delivering programs. In fact, when you reflect on the number of programs you've been involved in, it may be quite an impressive figure. You are probably involved in a variety of programs right now – some at a minimal level, others at a major level; some that are firmly established, others that are just beginning.

The initial step in bringing your evaluation plans into focus is to select a program to evaluate. Listed below are some ideas to consider and questions to ask yourself as you make this decision.

Remember, a "program" might be related to a project with a combination of activities (the 4-H livestock project involving project meetings, field days, judging contests, etc.), a specific component of that project (the carcass evaluation program), or a one-time or short-term activity (Bicycle Safety Day or a Babysitter Workshop).

Consider: A program where . . .

- The responsibility for the program has been clearly defined as part of your job (part of your position description or plan of work).
- You've been asked by your supervisor, advisory committee, or group external to Extension to account for program results.
- There's a high potential for increased or continued funding if positive results can be shown (for example, pilot programs funded with seed money or programs with insufficient resources to permit participation of all who are interested).
- The subject or approach is unique to Extension in your community (programs which reinforce school or other youth groups, but don't duplicate them). Examples: agricultural or home economics projects not offered in schools, nutrition day camps, organized activities for "latch key" children.
- You feel certain positive results are happening or you're willing to take the risk of showing that the program is not producing positive results.
Consider: How convenient and practical would it be to evaluate the program?

- Does the program lend itself to the collection of convincing data (will participants be willing to share their perceptions? can participants be identified and located)?

- Does the program have a clear direction or clear criteria by which it can be evaluated?

- Will results of the program be relatively easy to distinguish from those of other programs?

- Has the program been in effect long enough that results are likely to have occurred?

Consider: How persuasive are your findings likely to be?

- Are there strong vested interests or a long tradition in maintaining the program the way it is, even if your evaluation indicates a new direction?

- Do you want to continue the program, but have noticed some bugs that need to be worked out in its delivery? (It may be better to evaluate for program improvement rather than for program results at this time.)

- Is the program large enough - or important enough - that positive results will be perceived as 1) good use of staff resources, 2) filling an important need, and/or 3) having significant impact on the community?

Finally, choose a program where the results of the evaluation will be interesting and useful to you.

You may want to select a particular issue instead of a specific program or combination of activities - for example, the long-term impact of 4-H membership as perceived by former 4-H members who are now adults or the value of adult volunteer leader contributions to the 4-H program. If so, the above questions, with slight wording alterations, are still appropriate.

Scan the list on the next page, which identifies topics for evaluation as seen by the National 4-H Developmental Committee on 4-H Program Evaluation and Accountability. Some topics will be more appropriate than others to your particular situation, but the list may trigger some ideas for you.

When you have a promising program in mind, turn your attention to selecting a target audience for your evaluation...
A SUGGESTED LIST OF AREAS FOR EVALUATION STUDY

Following is a partial list of evaluation studies that could be done to document effectiveness of 4-H, developed by the National 4-H Developmental Committee on 4-H Program Evaluation and Accountability.

1. Leadership development - at different ages - as a result of experiences as a 4-H member. *Examples:*
   - Are 4-H members learning to function in leadership roles through 4-H experiences?
   - Are youth with several years of 4-H experience using leadership skills in other groups in the community?
   - Do 4-H alumni (with three or more years of 4-H experience) attribute some of their leadership capabilities to 4-H?

2. Volunteer 4-H leaders - adult and youth. *Examples:*
   - What are the types and amounts of contributions being made by volunteers to the 4-H program?
   - What personal growth and leadership development accrues to volunteers as they are involved in 4-H programs?
   - How much does the system of volunteer leadership development contribute to the effectiveness of 4-H trained volunteers in their functioning in other organizations and the community?

3. Community involvement/community development. *Examples:*
   - What are the major types and amounts of 4-H youth involvement in community activities?
   - Are 4-H youth - particularly teens - learning about and taking part, along with adults, in public affairs and community decision making?
   - Are 4-H alumni (with 3-5 years of 4-H experience) involved in community activities and do they attribute some of their interest to 4-H?

4. Effect of 4-H on career decisions and continuing education. *Examples:*
   - Do 4-H members see 4-H as helping them explore career alternatives?
   - Do parents see 4-H as contributing to job, career, and educational interests of 4-H members?
   - Do 4-H alumni see 4-H as contributing to their career and educational decision making?

5. Animals and poultry. *Examples: (can be adapted to other projects)*
   - What do young people see as the value of taking part in 4-H animal and poultry projects?
   - What do parents see as important outcomes resulting from young people taking part in animal and poultry projects?
   - What do 4-H alumni (enrolled three or more years in 4-H animal and poultry projects) see as the value of such experiences?
   - What do representatives of the livestock and poultry industry see as benefits of the 4-H animal and poultry projects?

6. Impact comparison study of 4-H clubs, special interest groups, urban programs, EFNEP (Expanded Food and Nutrition Education Program), and other 4-H program delivery modes. *Examples:*
   - What are the strengths and limitations of each?
   - How does one delivery mode reinforce others or broaden total 4-H outreach?
   - How do delivery modes relate to long-term goals (life skill perspectives) of youth development through 4-H participation?

8. Influence of 4-H on the family. *Examples:*
   - Does 4-H assist parents in their abilities to carry out parenting roles more effectively?
   - Does the family (or do other family members) learn from youth participating in 4-H?
WHO IS THE EVALUATION FOR?

An evaluation cannot be all things to all people. Although it's likely that the findings from your evaluation will be of interest to several individuals or groups, try to focus on one major audience. Design your evaluation to provide information specifically for that audience. Potential audiences include these:

- Your county, area, or district supervisor.
- Other Extension or university staff (specialists, program leaders, directors, colleagues, etc.).
- Government decision makers - county court, commissioners, legislators (and their aides).
- A donor who funded a specific program.
- A potential donor who has a special interest in the program you're evaluating.
- Advisory committees, other lay committees, support groups.
- Program participants - parents, volunteers, members, alums.
- Special interest/cooperator groups - agricultural commodity associations, other youth-serving agencies, inter-agency planning groups, 4-H Foundation.
- Voters, citizens.
- Media representatives - news editors, news directors, station managers.

As you plan your evaluation, take into account the people in your audience and their expectations of evaluation and of the program you're evaluating. Also consider the criteria or standards by which they judge program success, indicators of accomplishments they look for, and the forms of reporting they find most useful. Your first "research" task may be to find out more about your audience.

Think of yourself as assigned to collect and analyze information that your audience would gather on its own if it could. Keep a few representative members of your audience in mind as you progress through your evaluation, to keep you on track. Periodically ask yourself, "Would Roberta Newberry see the value of this approach?" "Would George Barwood understand this type of data analysis?" "Would Vernon Katzenberg accept this as convincing evidence of program success?"
WHAT DO YOU WANT TO FIND OUT?

Keeping the target audience for your evaluation report in mind, identify what information you'd like to communicate about the program you selected for evaluation. Consider what kinds of questions or key issues the target audience is concerned with, as well as the purpose or intent of your program and what you think have been the program accomplishments.

If your program has clearly stated objectives, begin by reviewing their appropriateness for evaluation. Do they relate to what you feel are the major program objectives? Do you suspect there are important side effects or unanticipated outcomes not expressed in the objectives? Do the objectives focus on information wanted, needed, or likely to be of interest to the target audience?

If the original program objectives are inappropriate, lost, or were passed on verbally like folklore, you might begin by writing a brief statement reflecting what you feel is the key issue you want to examine in your evaluation.

It's often helpful (some say necessary) to define your purpose in terms of an "evaluation question". If you have a clear idea of what you want to look for, this will be relatively easy. If not, you may need to spend some time examining your intentions. In either case, it's important that the evaluation question (or issue) be expressed precisely enough to keep you on track as the evaluation progresses.

Examples of evaluation questions:

"Half-asked" question: Does belonging to 4-H affect your later life?

More precise: What specific benefits of 4-H membership are seen by adults who are former 4-H members?

"Half-asked" question: How does 4-H contribute to members' health?

More precise: Does participating in 4-H help members acquire knowledge, skills, and attitudes that contribute to good health? Do 4-H members practice the good health habits they learn about?

Test your questions by asking: If I had an answer to this question, would it really influence programs? Result in changes? Show evidence of the value of Extension?

Choose a question that has more than a "yes" or "no" answer. Stay away from broad questions that have no clear answers, such as "Is competition good or bad?", "Does 4-H prevent crime?", unless you have a program that specifically addresses these issues.

Another approach that may stimulate your thinking concerns "levels" of program accomplishments as visualized by Bennett (1). He suggests that objectives of Extension programs exist at seven levels. The three lowest concern
program implementation; the four remaining levels concern program results. The program implementation levels are: 1) Extension staff invest a given amount of inputs in order to 2) conduct specified activities intended to obtain 3) people involvement in these activities. The program results levels are: 4) participants' immediate reactions to program activities; 5) participants' KASA changes - knowledge, attitudes, skills, and aspirations; 6) their practice changes; and 7) the end results that occur as a consequence of KASA and practice changes.

Using the trigger questions on the next page, check through the seven levels and identify examples of evidence at each level which could apply to the program you're going to evaluate. The levels are generally thought of as a "hierarchy", with evidence becoming stronger as the hierarchy is ascended, but also more difficult and costly to obtain. Evaluation is further strengthened by assessing programs at more than one level (in addition to the program implementation levels).

Once your major evaluation question has been identified to your satisfaction, it becomes a matter of pinpointing the specifics. In the previous example on health, you might define "good health habits" as cleanliness, physical fitness, exercise, rest, and good nutrition. More precisely, you might specify "brushing and flossing teeth", "selecting nutritious foods in a day's meals", etc. Consider what specific subject matter members would have had the opportunity to learn. Also consider where or how they would have learned it (project meetings, participation days, field trips, etc.).

It's sometimes helpful (and wise) to involve others in shaping your evaluation questions. Advisory or development committees or special support groups might be interested in identifying and defining areas to be explored. (Perhaps the target audience for your evaluation report might be consulted.) Colleagues with similar programs also have potential for helping focus evaluation issues.

This process usually has a brainstorming effect and you'll likely wind up with more ideas than you'll be able to incorporate into your evaluation design. You may need to prioritize your ideas later, but keep an open mind for now as you shift your focus to collecting data to test your questions.
A HIERARCHY FOR PROGRAM EVALUATION

7. End results
   What is the long term impact of the program?
   How have participants, their families, and communities been helped, hindered, or harmed by the results of changes in practices, knowledge, attitudes, skills, and aspirations? To what degree?

6. Practice change
   Have participants applied knowledge and skills learned?
   Have participants acted upon attitudes and aspirations changed?

5. KASA changes
   Knowledge, attitudes, skills, and aspirations:
   Knowledge
   Have participants changed their awareness, understanding, and/or problem solving ability? In what specific areas?
   Attitudes
   Have participants changed their interest in ideas or practices that were part of the program content? Which ideas? Which practices?
   Skills
   Have participants changed their verbal or physical abilities? Learned new skills? Improved performance? What skills? What abilities?
   Aspirations
   Have participants selected future courses of action or made decisions based on program content? In what areas?

4. Reactions
   How did participants react to the program? Were they satisfied? Were their expectations met? Was the program appealing? Do they perceive any immediate benefits?

3. People involvement
   How many participated? Who participated (descriptive characteristics)?

2. Activities
   What activities were involved (content or subject matter; methods and techniques)?

1. Inputs
   What resources were expended on the program (time, money, staff)?

PLANNING THE STRATEGY

After you've selected a program to be evaluated, identified an audience for the evaluation report, and determined what you want to find out, it's time to plan your evaluation strategy.

As your thoughts move to specific issues in data collection and analysis, keep in mind these questions:

- How much information is already available to help you answer your evaluation questions? How much new information will you need to collect?

- Who has the information/answers you need? (Members, parents, judges, etc.)

- What resources are available to help carry out the evaluation? (Time, money, staff, supplies, equipment)

- How accessible is assistance from those with evaluation expertise?

- What is the extent of your personal interest and ability in conducting an evaluation?

Also consider how you will collect and analyze the data: (Remember that you're still just thinking and planning at this stage.)

- What are the advantages, disadvantages, and limitations of various methods of collecting needed data?

- What type of data analysis would be most useful and practical?

Yet another consideration is the involvement of other people in planning and conducting the evaluation:

- Are there people in your target audience (for the evaluation report) who should be involved in the evaluation process?

- Are there roles appropriate for your county advisory or planning committees?

- Are there responsibilities that could be undertaken by volunteer leaders, 4-H members?

- Are there colleagues or others who should be made aware of your plans?

Remember to keep your supervisor informed about your activities from the time you begin putting your evaluation plans together. This will provide an opportunity to see if you're on track in terms of his or her expectations of your job performance. (Some supervisors say that one well planned, systematic evaluation in every four-year planning cycle is enough; others expect at least one every year. Be sure you know what is expected of you.)
More importantly perhaps, an informed supervisor will be alert to opportunities for coordinating evaluation efforts of various staff members. For example, piggybacking or dovetailing those efforts may lead to more efficient use of staff time. Coordination can also prevent instances where the same people are inundated by questionnaires or interviews from different Extension evaluators. This will likely become increasingly important as more and more evaluations are undertaken.

Scheduling your evaluation activities will help keep you on track so the evaluation can be completed and reported in time to be useful for your target audience. Consider when information is wanted or needed, as well as a suitable time to collect data from your program participants.

In Extension we often spend time making plans to do something, then find it difficult to follow up on those plans because our time keeps getting committed to meetings where we make even more plans. By scheduling "due dates" for various phases of your evaluation project, you can "protect" some of your time (and the time of others who may be assisting you) by making a specific commitment to follow through. People interested in appropriating some of your future time will usually respect the idea that you "have a deadline to meet" or "something already scheduled".

A checklist to help you plan and schedule your evaluation is presented on the following pages. Please don't be overwhelmed by the number of items on the list. The list is purposefully detailed so you won't overlook important steps in the evaluation process.

Some items will only take a short time to do; others will take longer. Still others may not be appropriate to your particular evaluation.

Space is available to record the date you plan to do the activity described in the item or the due date by which you plan to have accomplished the activity. There are also boxes for marking your progress by checking off items as they are completed. Items do not necessarily need to be done in the order listed.

The page numbers in parentheses refer to the handbook sections that provide information relating to the content of the item.

Keep in mind that your evaluation will usually be done over a period of weeks (or months in some cases). This doesn't mean that you'll be working on the project full-time, but it does mean that you will not need to keep everything in mind at once.

If you're currently involved in planning an evaluation, finish reading the entire handbook before filling out the checklist. Then return to the checklist and fill it out, reviewing handbook sections as needed.
Evaluation Checklist

This checklist can help you plan and schedule your program evaluation activities. It is purposefully detailed so you won't overlook important steps in the evaluation process. Some items will take only a short time to do; others will take longer. Still others may not apply to your particular evaluation project. Space is available to record the date you plan to do the activity described in the item or the due date by which you plan to have accomplished the activity. There are boxes for marking your progress by checking off items as they are completed. Page numbers refer to handbook sections providing information relating to the content of the item.

Focusing the Evaluation

☐ 1. Choose a program to evaluate. (pp. 7-9)
☐ 2. Select a target audience for the evaluation report. (p. 10)
☐ 3. Decide what you want to find out. (pp. 11-13)

Planning the Strategy

☐ 1. Check what information is already available.
☐ 2. Determine what new information you'll need to collect.
☐ 3. Identify who has the information you need.
☐ 4. Explore resources available to help do the evaluation (time, money, staff, supplies, equipment, access to evaluation expertise).
☐ 5. Gauge your personal interest and ability in evaluation.
☐ 6. Consider advantages, disadvantages, and limitations of various methods of sampling, collecting and analyzing data. (pp. 18-72)
☐ 7. Determine who will be involved at various points in the evaluation: make contacts as appropriate. (p. 14)

Collecting the Data

☐ 1. Decide on a data collecting method: mail questionnaire, telephone interview, face-to-face interview, etc. (pp. 18-27)
☐ 2. Draft questions that address what you want to find out. (pp. 28-42)
☐ 3. Double-check whether the draft questions will be good indicators of what you want to find out.
☐ 4. Design additional questions to fill in gaps, remedy omissions, etc.
☐ 5. Arrange the questions in a logical sequence. (pp. 43-44)
☐ 6. Plan details of a data analysis strategy to match the question and response format. (pp. 58-65)
☐ 7. Check wording, layout, and numbering scheme for questions and responses. (pp. 43-47, 61-63)
☐ 8. Write introduction and transitional sections appropriate to the data collection format. (p. 43)
☐ 9. Select a review panel of people knowledgeable about the program or experienced in evaluation. (pp. 51-52)
☐ 10. Review the questionnaire draft with the panel and solicit responses and recommendations.
☐ 11. Revise the questionnaire with reviewer comments in mind.
☐ 12. Establish procedures for follow-up (reminder letters, postcards, phone calls, etc.). (pp. 26-27)
☐ 13. Prepare lists of program participants, address, telephone numbers.
☐ 14. Design sampling procedure and draw the sample (if used). (pp. 56-57)

*Prepared by Barbara J. Sawyer, Extension 4-H - youth specialist, Oregon State University, June 1984.*
Collecting the Data (cont.)

15. Draft cover letter, postcards, or telephone introduction. (pp. 48-50)
16. Pilot test questionnaire on program participants not selected as part of the sample. (pp. 51-52)
17. Modify and revise questionnaire as needed.
18. Determine number of questionnaires, cover letters, postcards, and envelopes needed. Print and order. (p. 27)
19. Interviews: Select interviewers. (p. 53)
20. Interviews: Design training program for interviewers. (pp. 53-55)
21. Interviews: Train interviewers. (pp. 53-55)
22. Interviews: Interviewers collect data.
23. Mail: Produce sets of mailing labels.
24. Mail: Number questionnaires sequentially. Stuff and send first mailing. (p. 27)
25. Mail: Mail reminder postcards after one week.
26. Mail: Mail reminder letters and second questionnaire to non-respondents after three weeks. (p. 27)

Analizing the Data

1. Summarize response rates: completes, incompletes, undeliverables, refusals (or busy signals, wrong numbers, etc.).
2. Code and tabulate questionnaire responses. (pp. 61-65)
3. Calculate statistics. (pp. 58-60)

Interpreting the Findings

1. Examine the findings from different angles. (pp. 66-68)
2. Make judgments based on your observations. (pp. 69-72)
3. Summarize the highlights from findings, interpretations. (p. 72)
4. Determine conclusions, recommendations, and/or implications supported by evidence. (pp. 72)

Reporting the Results

1. Select a reporting method to reach your target audience. (pp. 73-74)
2. Prepare the report. (pp. 78-82)
3. Distribute written report or present oral report. (pp. 74-77)
4. Identify additional audiences for evaluation reports. (pp. 74-77)
5. Distribute or present findings to additional audiences.

Wrapping it Up

1. Destroy list of names matching respondent numbers on questionnaires. (p. 83)
2. Acknowledge assistance of those who helped support your evaluation efforts (thank you letters, calls, etc.)
3. Identify evaluation findings relating to program improvement and feedback into program planning process. (p. 83)
4. Think about plans for your next evaluation effort.
COLLECTING THE DATA

The most "work" in an evaluation usually centers around the data collection. There are lots of ideas to consider and decisions to make. The first issue to be settled is the way in which the data will be collected.

METHODS, TECHNIQUES, AND TOOLS

A variety of opportunities for data collection appears in the list below. The appropriateness of some for your evaluation project may be readily apparent; others you may want to reserve judgment on until you brainstorm the possibilities.

Surveys - Individuals are asked to provide information on a written questionnaire, mailed or otherwise distributed, or asked questions orally by an interviewer using a written questionnaire.

Focus group interviews - Typically a series of group interviews, focused on a single theme, facilitated by a moderator and recorded on tape for later analysis of response patterns.

Formal examinations - Individuals are tested using pre-determined criteria and performance standards.

Direct observation - Participant behavior or performance is systematically evaluated and recorded by a trained observer.

Content analysis - Existing documents such as records, forms, and demographic and other statistical data are reviewed and analyzed in terms of content relating to the purposes of the evaluation.

Case studies - Individuals or small groups are described in intensive detail using a combination of records, interviews, and observations to document program impact.

Journals, logs, diaries - Individuals are asked to record feelings and actions related to program content over a period of time; entries are then analyzed.

Simulated problems or situations - Individuals are asked to respond to computer simulation models, mock disasters, etc., with performances evaluated against criteria.

Testimonials, anecdotes - Individuals' personal experiences are described by them in narrative fashion (testimonials) or reported in "success stories" relating to program results (anecdotes).

Photographs, videotapes, slides - Participation is documented to describe programs or illustrate changes.

Formal program review - An entire program, including its impact, is studiously examined by a committee or panel of experts.

Cost-benefit analysis - The economic costs and benefits of a program are estimated to determine the program's overall value, using rather complex formulas.
Some programs may lend themselves to several kinds of analysis with relatively little effort. For example, suppose you are evaluating knowledge and skills learned in the 4-H food preservation project. A combination of methods of data collection might include this "package":

- **4-H project records** - Tabulate to show amount of food preserved, variety of methods used (canning, freezing, drying), and estimated value of the food to the family.

- **Judging of food preservation exhibits at county fair** - Tabulate data from judges' check sheets to assess quality of finished products as well as check on methods used to insure food safety. (4-H would seem to have an advantage when it comes to evaluation by "trained observers", yet we don't seem to use it as fully or as well as we could.)

- **Food preservation judging and/or skills contest** - Assess members' knowledge and decision making ability in terms of food safety information, use of recommended procedures, ability to evaluate quality in a finished product, knowledge of nutrition, and skills in preparing foods for preservation. Tabulate data from member placings.

Other programs might have little or no feedback mechanisms in place and require more effort to evaluate.

It's true that some specific "tools" exist with a track record of being applied successfully in more than one evaluation situation. Most evaluations, however, require individually styled approaches. Modifications are needed to accommodate differences in program types, sizes, and settings; specific questions to be answered; available resources; and the skills and abilities of the evaluators.

Although you might occasionally incorporate a standardized scale in an evaluation instrument you produce, it would be a rare occurrence if you could find an evaluation instrument already designed that used by itself would satisfy your needs for even one program evaluation. Even if you decided to duplicate a study done by someone else it's likely that you'd have to make some changes to suit your specific purposes.

Probably the best use of such tools is to trigger ideas, rather than suggest replication. With that thought in mind, it's often a good idea to collect examples of evaluation reports, questionnaires, check sheets, attitude scales, etc. that seem to have worked well for others and which address issues you might someday choose to examine. Some examples in your collection may identify a fresh approach for you to consider; others may contribute but a single item that captures a thought you've not been able to articulate clearly.

Because of the widespread interest and use of surveys in Extension, the remaining discussion in this chapter focuses on collecting data in a survey situation. Included are advantages and disadvantages of mail and telephone surveys, methods of implementing, and ways to increase participant response.
By all means remember:

Don't plan a data collection effort that's so elaborate you won't have the energy to do anything later.

Save some strength for the data analysis and for reporting your findings!

THE SURVEY APPROACH

Most Extension programs occur in informal community settings rather than in formal classroom situations. People may "volunteer" to participate in either type of learning experience, but there are major differences. Among them:

<table>
<thead>
<tr>
<th><strong>Extension programs</strong></th>
<th><strong>Formal course work</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement may be short term (only one activity) or longer term (a series of related or unrelated activities).</td>
<td>Usually involves a relatively long-term commitment, a precisely defined curriculum, and regular attendance.</td>
</tr>
<tr>
<td>Emphasis is on applying information after the program is completed.</td>
<td>Emphasis is on learning information during the program.</td>
</tr>
<tr>
<td>Participants individually determine whether or not to apply information learned, and are under no obligation to report back.</td>
<td>Participant performance is measured for formal testing and grading as part of the process to meet specific requirements.</td>
</tr>
</tbody>
</table>

In other words, most Extension educators do not have a captive audience highly motivated to provide feedback, nor do they have (or likely want) the clout necessary to threaten participants by withholding grades or other rewards until such feedback occurs.

Because of its adaptability to informal settings and its flexibility in accommodating different situations, the survey approach is often used in Extension program evaluations.
Almost any observation or investigation of a situation can be called a "survey". In Extension evaluation, the word is most often used as follows:

- **Survey** - A "one shot" effort where data are collected only once. Can involve participants only (self-reporting any results of having participated in a specific program) or both participants and non-participants (a cross-sectional survey to determine citizen opinions on the effectiveness of the Extension Service, for example).

The survey approach can also be considered as the base of more complex approaches commonly used to collect data in Extension program evaluations. (12) These "study designs" deal with specific issues of when data are collected and from whom:

- **Time-series study** - Comparisons are made between data collected before and after participation. Requires benchmark data or involves pre- and post-tests given to the same group of program participants. Also called "time-trend" studies when participants are repeatedly measured before, during, and after participation.

- **Comparison group** - Program participants and non-participants (a control group) are compared. Requires benchmark or pre- and post-test data.

- **Field experiment** - A program is made available to clientele selected randomly (through chance alone) from some potential audience. The part of the audience which does not participate becomes the "control group". (Random selection differentiates this design from the "comparison group" where participants "volunteer" to participate in the program.)

The interrelationships of these approaches are apparent. The time-series design involves collecting survey data at two or more points in time. The comparison group design, in turn, uses time-series in making pre- and post-comparisons. Finally, the field experiment is a type of comparison group design.

These study designs are included here since you probably have at least some familiarity with the concepts of benchmark data, pre- and post-tests, and control groups, and might be wondering how they fit into the scheme of things.

Another reason for including them is to show the versatility of the survey technique. If you build your evaluation skills in conducting surveys, you'll be armed with information and experience that can be applied over and over again in a multitude of evaluation situations.

If you feel comfortable with choosing a time-series, comparison group, or field experiment for your evaluation project (and it meets your purposes), go ahead. However, it's perhaps best for beginners to stick with the "one shot" survey for their first evaluation attempt.
MAIL AND TELEPHONE SURVEYS

Survey information can be collected in a variety of ways, all involving some type of written questionnaire (sometimes called an "interview schedule" if the interview technique is used). Questionnaires can be:

- **Mailed** to selected individuals.
- **Distributed other than by mail** (passed out at the end of a meeting or printed in a newspaper, for example).
- **Used in a telephone interview**, where respondents give oral responses recorded by the interviewer.
- **Used in a face-to-face interview**, where respondents give oral responses recorded by the interviewer.

Mail and telephone surveys are usually preferred since they offer opportunities to identify specific individuals as potential respondents (not a characteristic of end-of-meeting or newspaper surveys). Also, they are relatively inexpensive (especially when compared to face-to-face interviews which can be extremely costly).

End-of-meeting surveys are fine for quick feedback relating to immediate reactions and good intentions, but results relating to behavior change, practices adopted, etc., only happen over time. There are other disadvantages to end-of-meeting surveys. Some people leave without filling them out or rush through their responses. Also, findings cannot be generalized to other groups. For example, data collected in a training workshop where attending leaders are asked to comment on the overall home economics program cannot be generalized to all home economics leaders. Leaders attending the workshop may not be representative of all home economics leaders - their attendance may indicate more commitment to their leadership roles, for instance, and their views may not reflect the range of views of all leaders.

Mail and telephone surveys also have disadvantages in addition to their advantages. Some of these are outlined on the next page, along with conditions that make each especially appropriate to particular situations. Consider this information along with:

- The characteristics of the audience from whom you are collecting the data.
- The kind of information you're seeking.
- How quickly you need to complete your data collection.
MAIL SURVEYS

Advantages, Disadvantages:

- Relatively easy, quick, and inexpensive method of reaching large numbers of people, especially when compared to interviews. Costs include printing, postage, labels, stuffing.

- Data collection can take up to seven weeks with follow-up.

- Rather complex questions can be presented (scales, matrices). However, there's no one to ask if questions are not understood.

- Response rates will likely be quite low unless persistent follow-up is done (letters, post cards, calls).

- There is little control over completeness of answers. Respondents can leave some answers blank.

- Those who reply may not be "typical" participants. May hear from those who represent "extremes".

- No interviewer bias, but could have questionnaire bias.

- Some respondents may feel it's an imposition to be asked to fill something in and mail it back.

Especially appropriate when:

- Visuals are needed.

- Long lists (or matrices) will be included.

- Respondent needs to think about or look up something.

- Privacy is necessary or helpful.

- It doesn't matter who in the household provides the answers.

- Questions can be answered in any order.

TELEPHONE SURVEYS

Advantages, Disadvantages:

- Costs include telephone charges (if any), interview time, some printing. Interviewers require special training in interviewing skills, purpose of the survey, etc.

- Depending on the number of interviews, may take several days or weeks.

- Clear, simple questions are needed as respondent can't "see" what's being asked. However, interviewer can explain questions not understood.

- Usually a high rate of response, although several calls may be needed. Sometimes frustrating to keep calling.

- Complete answers to all questions can usually be obtained, contributing to statistical accuracy.

- May be biased in favor of households with telephones. (May be more of a factor if telephone costs increase.)

- Interviewer bias, as well as questionnaire bias, could be a factor.

- Establishes a personal contact with the respondent and may make him/her feel important to be included.

Especially appropriate when:

- Questions don't require visuals.

- Only short lists or response categories will be included.

- Respondents can give a quick reaction without contemplative thought.

- Privacy is not necessary.

- Responses are needed from a specific individual.

- Questions need to be asked in sequence.
Two important resources provide valuable assistance in implementing surveys. Both offer practical and useful advice that can be readily applied to program evaluation.

The RAP (Reflective Appraisal of Programs) approach, developed by Claude Bennett (1), uses standardized questions that can be adapted to a variety of programs and subject matter, using telephone or face-to-face interviews to collect data from a minimum of 30-40 participants. The interview questions correspond to levels in the "program evaluation hierarchy" (on page 13), also Bennett's work. Suggested questions for each level appear on the next page.

RAP depends on reflective evidence, so-called because the interview procedure requires program participants to reflect upon their feelings, behavior, and/or conditions before, during, and after their participation in the program being evaluated. Respondents estimate the amount of change they experienced or observed that can be attributed to participation in the program. This perceived "before and after" evidence of program effectiveness is one way of dealing with the problem of identifying what causes or influences change.

RAP provides an easy introduction to survey methods for those who have little or no evaluation experience. An example of a questionnaire using the RAP approach is included in the appendix.

The "total design method", developed by Don Dillman (5), describes techniques for conducting successful mail and telephone surveys yielding a high rate of response. Dillman appears to address practical attention to every issue and detail that one could imagine affecting response behavior. Although his primary interest is in opinion surveys, his method can be readily adapted to program evaluation.

Dillman attributes his high response rate (an average rate of 74% for 48 different mail surveys using the total design method) to a number of factors incorporated into the following advice:

- Make the questionnaire interesting and attractive.
- Use a consulting approach (asking respondents for their valuable assistance; indicating how their response will be helpful; and explaining that they are part of a carefully selected sample, with their response needed if the survey is to be successful.)
- Give written or verbal appreciation in cover letters, questionnaires, and interviews.
- Establish trust by identifying with a known organization (such as Extension) and assurances of confidentiality (not to be confused with "anonymity").
- Make the task appear easy by reducing the effort required (clear, concise questionnaires with clear, concise questions; enclosing a stamped return envelope with mail surveys).

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EVALUATION QUESTIONSª SUGGESTED IN THE RAPª APPROACH

7. End results
You indicated that you have made use of the ideas or skills regarding (subject). Overall, how helpful have the results been?

About how much money have you gained, saved, or lost over the past (time period) as a result of using the ideas or skills from (subject)?

6. Practice change
To what extent have you put to use the ideas or skills regarding (subject)?

5. KASA changes
Knowledge
Think back to the activities in which you were involved. To what extent did you learn more about (subject)?

Attitudes
To what extent did you become more interested in (subject)?

Skills
To what extent did you acquire more skills in (subject)?

Aspirations
To what extent did you become more determined to try out (subject)?

4. Reactions
To what extent did (activity) meet your expectations at the time?

3. People involvement
Information gathered from records, reports, files, and personal recollections of yourself and others involved.

2. Activities

1. Inputs

ªThese are only sample questions from the RAP Guide. Response categories for level 7 are: very helpful, fairly helpful, slightly helpful, no help at all, harmful, don't know. Response categories for levels 4-6 are: to a great extent, to a fair extent, to a slight extent, not at all.

Dillman also recommends a well-planned and persistent follow-up campaign when questionnaires are distributed by mail:

- **After one week** - A post card thank you to those who have responded and a friendly reminder to those who haven't.

- **After three weeks** - A letter and questionnaire to non-respondents; the cover letter is shorter than the original and response is again urged.

- **After seven weeks** - A final mailing to non-respondents, similar to the three-week mailing.

An example of a questionnaire designed with Dillman's advice in mind appears in the appendix.

Procedures for implementing mail and telephone surveys are outlined on the next page. Dillman's approach to mail surveys is incorporated, as adapted by Berg (2).

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**NOTE**

Both mail and telephone surveys can be vulnerable if forced to measure up to rigid criteria for validity (are you measuring what you think you're measuring?) and reliability (are your measurements accurate, consistent, dependable?). So it is extremely important to build reliability and validity into your evaluation by making sure that:

- Questions give a strong indication they measure what they're intended to measure (face validity).

- Samples selected appear to be representative of the total number of program participants.

- Questionnaires or interviews have a reasonably high rate of response.

- Data are analyzed and interpreted with integrity.

- Results are credible, and reported in thoughtful, useful, and timely ways.

The following chapters will focus on how these tasks can be accomplished.
MAIL SURVEYS

1. Make list of program participants.
2. Draw sample (if used).
3. Produce 5 sets of mailing labels, numbered sequentially (for first mailing, 2 follow-ups, and master list).
4. Develop questionnaire.
5. Pilot test questionnaire and modify.
6. Develop 3 cover letters and a postcard.
7. Determine how many questionnaires, letters, postcards, and envelopes will be needed. Estimates for an 80% response rate:
   - 180% questionnaires
   - 100% first cover letters
   - 100% reminder postcards
   - 50% 2nd cover letters
   - 30% 3rd cover letters
   - 180% mailing envelopes
   - 180% return envelopes
9. Number questionnaires sequentially.
10. Stuff and send 1st mailing, using 1st cover letter, questionnaire, and 1st set of mailing labels. (Careful to match numbers of questionnaires to numbers of respondents on master list.)
11. After 1 week, mail reminder postcards, using 2nd set of mailing labels.
12. Remove names of those responding from 3rd set of mailing labels.
13. After 3 weeks, stuff and send 2nd cover letter, questionnaire, using 3rd set of mailing labels.
14. Remove names of those responding from 4th set of mailing labels.
15. After 5 weeks, stuff and send 3rd cover letter, questionnaire, using 4th set of mailing labels.
16. Using the 5th set of mailing labels (master list), summarize response rate, undeliverables, completes, incompletes, refusals.
17. Code and tabulate questionnaires.
18. Analyze and interpret data.
19. Report the findings.

TELEPHONE SURVEYS

1. Make list of program participants.
2. Draw sample (if used).
3. Develop questionnaire.
4. Pilot test questionnaire and modify.
5. Develop introduction:
   - Identify caller by full name
   - Identify organization the caller represents (Extension)
   - Establish that the correct respondent is on the phone
   - Assure confidentiality
6. Duplicate questionnaires.
7. Write telephone numbers on questionnaires.
8. Train interviewers
   - Consistent
   - Receptive
   - Nonjudgmental
   - Persistent
   - Knows what to say "if"
9. Collect data
   - Best times: between 4 and 9 p.m. weekdays, 10 a.m. and 4 p.m. Saturdays (no Sundays)
   - Avoid: popular sports events, presidential press conferences, blockbuster TV shows
10. Summarize response rate, no answers, busy signals, wrong numbers, disconnected numbers, refusals, incomplete interviews, completed interviews.
12. Analyze and interpret data.
13. Report the findings.
WRITING QUESTIONS

Questions are the key to nearly every evaluation effort. There are the evaluation questions that lead you to undertake an evaluation in the first place (what to ask), and the specific questions that will be used to collect the data from those who can give you information (how to ask).

There is a distinct difference between the two. In chapter 1 (What Are You Going to Evaluate?), the emphasis was on what to ask (identifying the purpose of your evaluation). Now it's time to consider how to ask (formulating specific questions for respondents). Check out the examples below to clarify the difference:

**What to ask:**

- Does participating in 4-H help members acquire knowledge, skills, and attitudes that contribute to good health?
- More specifically, what do 4-H members learn about exercise and good nutrition?
- Do 4-H members apply information about exercise and good nutrition?
- More specifically, have their exercise levels improved? To what extent?

**How to ask:**

- What are the five food groups?
- How many servings a day do you need from each group? List three foods from each group.
- Do you eat a variety of foods every day (fruits and vegetables, breads or cereals, lean meats, dairy products)?
- Do you brush your teeth after meals and after eating sticky sweet foods?
- Do you exercise hard for 15-30 minutes at least three times a week? (running, swimming, dancing, etc.)

There is more than one way to word a question, of course, and this chapter offers some advice and alternatives. Included are sections in:

- Types of information
- Types of questions
- Wording questions
- Questionnaire format

This may appear to be more than you want to know about questions. So perhaps it's worth a reminder that a questionnaire is only as good as its questions. And that knowing more about questions will better prepare you to tackle methods of evaluation other than surveys as you continue to build your evaluation experience.
When you're putting the advice in this handbook into actual practice, as opposed to reading it for future reference or recreational purposes, consider the following suggestions in sequence:

- Review the section on "What Do You Want to Find Out?", pages 11-13 (what to ask).

- Read the following sections relating to "Writing Questions" (how to ask).

- Formulate specific questions for respondents, using your evaluation questions as a guide:
  - Brainstorm first, writing down all questions that occur to you as possibilities to get the desired information.
  - From the resulting pool, select those that seem best suited to your evaluation, refine their wording, and check them against the purpose of your evaluation.
  - Plug any gaps or remedy omissions by designing additional questions.
  - Arrange the questions in logical sequence and write the introduction and transitional sections.

- Pilot test resulting questionnaire; modify as needed.

Be specific, be selective, and be realistic. No matter what information you're after, you need to know why you want it and how you intend to use it.

Make every question count.

Collecting too many data is like planting too many zucchini...
The purpose of asking a question is to get information. Dillman (5) divides questions into four categories based on the type of information requested - attitudes, beliefs, behavior, and attributes. A single questionnaire might contain examples of questions in all four categories, but that will not make it a good or bad questionnaire. (See box for description of information types.)

Why is it important to know what type of information you want? First, it not only helps clarify or reinforce the focus of your entire study, but it provides direction for the specific wording of individual questions.

Quite often evaluators will say they are interested in exploring people’s behavior, yet the questions they draft primarily concern attitudes and beliefs.

At that point a decision needs to be made. Is the real intent to survey attitudes and/or beliefs, or actual behavior related to those attitudes and beliefs?

Perhaps questions might be included to elicit all four types of information, but you should make a conscious choice depending on the purpose of your evaluation.

Another reason for knowing the types of information you want is that each type tends to lead to different writing problems. Generally, questions about attitudes and beliefs are far more sensitive to wording variations than questions about behavior or attributes.

Types of Information

1. How people feel about something (attitudes).
   - Asks people to tell you whether they have positive or negative feelings about a topic. Words typically used in attitude questions are: favor versus oppose, should versus should not, reasonable versus unreasonable.
   - Example: Do you think the state income taxes you may pay are reasonable or unreasonable considering the benefits you receive?

2. What people think is true (beliefs).
   - Assessment of what a person thinks is true or false. Often used to test knowledge. Can also be used to elicit people’s perceptions of past, present, or future reality.
   - Example: Which of the following snack foods are good for you nutritionally?

3. What people do (behavior).
   - Asks people to describe what they have done in the past, what they are currently doing, or what they plan to do in the future.
   - Example: There are a number of things a household might do to conserve energy used to heat hot water. Please indicate whether or not you have taken each of the actions listed below.

4. What people are (attributes).
   - Also known as personal characteristics or descriptive data (age, sex, income, education, residence, etc.)
   - Example: What is the highest grade you have completed in school?
TYPES OF QUESTIONS

Questions can be framed in a variety of ways. On the next several pages are advantages, disadvantages, and examples of:

1. Open-ended questions
2. Close-ended questions with ordered choice answers
3. Close-ended questions with unordered choice answers
4. Partially closed questions
5. Other variations

Any of these types of questions may be the "best" to get the information you're after. Use what works for your specific purposes. If you're in tune with what you want to find out, you'll find that most questions suggest the appropriate structure.

Open-ended Questions 1

- Most often used to stimulate free thought, solicit creative suggestions, or recall information learned (see first three examples below). Can require considerable time, thought, and effort to answer. Tabulating and analyzing responses can be difficult.

- Also useful when respondents are asked to supply a specific answer and there are a large number of possible responses. (See fourth example below.)

- Can be used as a "probing" question to elicit more detail about a previous response. (See fifth example below.)

- Often used at the end of a questionnaire to ask respondents for any additional comments they might have regarding the topics of the survey (see last example below).

- Examples:

  What's the most important thing you learned from this program?
  What do you think should be done to improve the 4-H animal science program?
  Name the five basic food groups.
  In what county is your residence located?
  Could you give me an example or two? or Would you mind giving me an example of what you mean?

  We are interested in knowing any other comments you might have concerning the 4-H program and your role as 4-H leader. Please write in the space below any thoughts you'd like to share with us.
Close-ended Questions with ORDERED Choice Answers

- Respondents are provided with a list of answers and asked to check or circle the choice they feel is the best.

- Response categories are usually intended to measure degree or intensity and are part of a gradient or continuum. (Particularly suitable for attitude questions.)

- Not as demanding for respondents as open-ended questions. Responses are easier to tabulate and analyze.

- Example:

  Within your 4-H club, describe the extent to which you were included in making important decisions:

  1. OFTEN
  2. SOMETIMES
  3. RARELY
  4. NEVER

- Listed below are some examples of response categories. There is no need to use the same categories for each question - choose those that are appropriate to the question. If you use the same set of response categories in different parts of the questionnaire, it's helpful to use them in the same order each time. For example, if you have "strongly agree... strongly disagree" response categories, list the options in the same order each time those categories are used. Also consider adding "don't know" or "can't recall" to the responses when appropriate.

  It's important that categories reflect balance. Bad example: "increased, stayed the same, decreased a little, decreased somewhat, decreased a lot."

  | VERY SATISIFIED          | STRONGLY AGREE           | STRONGLY FAVORABLE        | TO A GREAT EXTENT       |
  | SOMEWHAT SATISFIED       | SOMEWHAT AGREE          | SOMEWHAT FAVORABLE        | TO A FAIR EXTENT        |
  | UNCERTAIN                | UNCERTAIN               | UNCERTAIN                 | TO A SLIGHT EXTENT      |
  | SOMEWHAT DISSATISFIED    | SOMEWHAT DISAGREE       | SOMEWHAT OPPOSED          | NOT AT ALL              |
  | VERY DISSATISFIED        | STRONGLY DISAGREE       | STRONGLY OPPOSED          |                        |
  | VERY HELPFUL             | VERY IMPORTANT          | ALWAYS                    | EXCELLENT               |
  | FAIRLY HELPFUL           | SOMEWHAT IMPORTANT      | USUALLY                   | GOOD                    |
  | SLIGHTLY HELPFUL         | NOT IMPORTANT           | Seldom                    | FAIR                    |
  | NO HELP AT ALL           | UNDECIDED               | NEVER                     | PDR                     |
  | HARMFUL                  |                         |                          |                        |
  | A SERIOUS PROBLEM        | TOO MUCH                | INCREASED                 | YES, DEFINITELY USE     |
  | A MILD PROBLEM           | ABOUT RIGHT             | STAYED THE SAME          | YES, PROBABLY USE       |
  | A SLIGHT PROBLEM         | TOO LITTLE              | DECREASED                 | NO, PROBABLY NOT USE    |
  | NOT A PROBLEM AT ALL     |                         |                          | NO, DEFINITELY NOT USE  |
Close-ended Questions with UNORDERED Choice Answers

- Respondents are provided with a list of answers and asked to check or circle the choice they feel is the best response.
- Response categories are independent of one another, rather than being parts of a gradient or continuum. (Can be used to solicit information or to test knowledge, as in multiple choice questions.)
- Not as demanding for respondents as open-ended questions. Responses are easier to tabulate and analyze.

Examples:

What do you think should be the organizational structure of 4-H in Clover County? (Circle one number.)

1. AREA-WIDE COUNCIL WITH REPRESENTATION FROM ALL CLUBS IN THE AREA
2. COUNTY COUNCIL WITH REPRESENTATION FROM CLUBS IN THE COUNTY
3. LOCAL CLUBS DETERMINE THEIR OWN POLICY WITH NO AREA OR COUNTY COUNCIL

What does the word "nutrition" mean to you? (Circle one number.)

1. GETTING ENOUGH VITAMINS
2. THE FOOD YOU EAT AND HOW YOUR BODY USES IT
3. HAVING TO EAT FOODS I DON'T LIKE

Partially Closed Questions

- A compromise between open-ended and close-ended questions. Protects you if you've left out an important category.
- Respondent is usually offered a choice of unordered answers plus a category such as "other (please specify)".

Example:

What do you consider the main responsibility of your county 4-H agent? (Circle one number.)

1. WORK WITH PEOPLE WHO REQUEST HELP
2. WORK WITH 4-H MEMBERS
3. WORK WITH VOLUNTEER 4-H LEADERS
4. PLAN AND ORGANIZE COUNTY YOUTH EVENTS
5. ORGANIZE AND EXPAND NEW 4-H CLUBS
6. OTHER (Please specify)
Other Variations

- Respondents are given a listing of responses and asked to rank them in order of importance or indicate a "top three." (First example below.)

- Respondents are asked to match responses to a listing of items. (Second example below.)

- Respondents are given forced choices, usually expressed in terms of "either/or" or one item "vs." another. (Third example below.)

- Examples:

What would you like to know more about? Select three responses and rank them in order: 1, 2, 3.

- WHAT TO EAT TO LOOK BETTER
- HOW FOOD AFFECTS YOU
- WEIGHT CONTROL
- PHYSICAL CONDITIONING THROUGH DIET
- VITAMINS
- HEALTH FOODS
- FOOD ADDITIVES
- VEGETARIAN DIETS

Match each food to the proper food group by putting the right letter in the blank. For example: C. STRAWBERRY

- WHOLE WHEAT BREAD
- NECTARINE
- HAM
- YOGURT
- PUMPKIN
- OATMEAL

A. MEAT
B. MILK
C. FRUITS AND VEGETABLES
D. BREAD AND CEREAL

Which of these snack foods are good for you nutritionally? Check your choices for each pair.

- TWINKIES vs. OATMEAL COOKIES
- MILK vs. KOOL-AID
- POTATO CHIPS vs. NUTS
- RAISINS vs. POPCORN
- APPLE vs. FROSTED CAKE
WORDING QUESTIONS

Probably one of the most difficult tasks in questionnaire construction is deciding on the exact wording. It's not easy to write a question that all respondents will interpret the same way and that will elicit the type of response you want.

As you work, keep your respondents in mind. Remember, they are doing you a favor. To increase the chances of their participation, keep your questions brief, straightforward, and directly related to the purpose of the evaluation. Most people are surprisingly willing to cooperate if they know their information is important, their answers will be confidential, and the task is reasonable.

A selected sampling of "do's and don'ts" appears below:

- Use simple wording. Adapt to the vocabulary and reading skills of your respondents, but don't talk down to them.

- Avoid the use of abbreviations, foreign phrases, or jargon. Extension is particularly vulnerable where jargon is concerned. Will your respondents understand "program thrusts", "delivery modes", "life skills", "enrichment experiences", "results indicators"?

- Be specific. For example, a question about older youth should specify what age or grade is considered "older". Another example: "How many times did your 4-H club meet last year?" Is that 1992? 1992-93? During the last 12 months? September 1992 - August 1993?

- Avoid questions that do not provide enough information to be adequately answered: "Do you agree or disagree with the proposed plan to expand the role of 4-H volunteers in our community?" Respondents may not know what the plan is. Provide a statement summarizing the plan.

- Avoid questions that may be too demanding for even the most enthusiastic respondent. "How many times did you eat out last year?" "Please rank the following 15 items in order of their importance to you." "In 25 words or less, what is your philosophy of 4-H?"

- Avoid double questions: "Do you think 4-H has helped your child gain self confidence and learn to work with others?" It would be better to put "self confidence" and "work with others" in two separate questions.

- Use the same type of question when following a single train of thought. Skipping from multiple choice to open-ended to rank ordering and back again can be distracting. (This doesn't mean that all your questions have to be the same type - that would be boring. If you have a cluster of questions dealing with the same topic, however, there's an advantage to keeping them similar in style.)
Whenever possible, use techniques where the respondents only have to circle or check a response. Having to do a lot of writing turns most people off.

If you include items that some respondents may not be able to answer, be sure there is a way that a "don't know" response can be indicated. Don't overwork this option, however - some respondents may "cop out" at every opportunity they are offered.

In evaluation studies it's usually not necessary to check for consistency by asking the same (or a similar) question twice at different points in the questionnaire. You'll likely not be dealing with sensitive or elusive issues where this technique is most appropriate. In a relatively short questionnaire a repeated item is usually picked up, and your respondents may become annoyed by what they see as redundancy or an attempt to "trip them up."

Keep in mind how the questionnaire will be used (mailed, telephone interview, or face-to-face interview). In telephone interviews the respondent will be hearing, rather than reading, the questions and there will be no opportunity for visual cues. For both telephone and face-to-face interviews the interviewer instructions will need to be included on the questionnaire.

Finally, try your questions on colleagues and people with characteristics similar to those of your potential respondents. Ask them to test (informally) for readability, understanding, and unbiased questions. Check their responses against the type of information you're requesting. Take extreme care with question wording - good questions will pay off when you get ready to analyze the data!

On the following pages are some tips for dealing with specific wording or structuring problems:

- Avoiding bias.
- Multiple response formats.
- Items in a series.
- Attribute categories.
Avoiding Bias

Bias can sneak into questions even when your intentions are pure. Some wording problems that create bias are presented below. Notice that many of the revised questions tend to be longer than the original questions. Sometimes people try to make questions as short as possible (which is a noble undertaking), but sacrifice clarity and neutrality in the process.

- Unbalanced categories. The following example is contributed by Bodenroder (3), who observes that the writer seems reluctant to face the possibility of reduced funding.

  Question: Do you think the budget for the Extension Service in your county should be:
             INCREASED
             STAY THE SAME
             DECREASED A LITTLE
             DECREASED SOMEWHAT
             DECREASED A GREAT DEAL

  Revision: Do you think the budget for the Extension Service in your county should be:
             INCREASED GREATLY
             INCREASED SLIGHTLY
             STAY THE SAME
             DECREASED SLIGHTLY
             DECREASED GREATLY

- Unbalanced questions. The example below not only sets up the respondent for a "yes or no" response (which will likely yield less useful data than categories which reflect grades or degrees), but implies a bias toward "favor". The revision offers choices relating to both "favor" and "oppose". Other pairings for similar types of questions are "agree or disagree", "reasonable or unreasonable", and "should or should not".

  Question: Do you favor increased funding for Extension in your county? (Response categories - yes or no)

  Revision: Do you favor or oppose increased funding for Extension in your county? (Response categories - strongly favor to strongly oppose)
Identification with a person or group. Including both "agree" and "disagree" in the following example is commendable. However, identifying the state 4-H office in this context may provide a positive or negative bias, depending on the respondent's feelings about that office and those in it.

**Question:** Do you agree or disagree with the state 4-H office that parents benefit as much as members do in learning from 4-H projects? (Response categories - strongly agree to strongly disagree)

**Revision:** Now we'd like to know your opinion about various aspects of the overall 4-H program. Please indicate the extent to which you agree or disagree with the following statement: Parents benefit as much as members do in learning from 4-H projects. (Response categories - strongly agree to strongly disagree)

Making assumptions. All questions should make the respondent feel included, to heighten the impression that the respondent is important and you really are interested in what he or she has to say. The example below would be OK if you had reason to believe that all your respondents were parents. Otherwise, the revision is preferable.

**Question:** How many children do you have?

**Revision:** Do you have children?

    YES  How many? ________
    NO

Leading questions. These kinds of questions are phrased in a way that might influence the respondent to give an answer which does not accurately reflect his or her position.

**Question:** Do you agree that the youth in your community think 4-H is an organization with status and prestige? (Response categories - yes or no)

**Revision:** Do you agree or disagree that 4-H is considered a status organization by the youth in your community? (Response categories - strongly agree to strongly disagree)

**Better:** Young people sometimes consider it more an honor or prestige to belong to one organization than another. Thinking of all the youth organizations in your community, in which of the following groups do you think the youth of your community would put 4-H? (Response categories - top group, next to the top, middle, next to the bottom, bottom group)
Multiple Response Format

The following question is a type often seen in surveys. Bodenroder (3) calls it "the dreaded circle-all-that-apply question". It looks like this:

There are a variety of information sources available about energy conservation. Which of the following has been a source of information for you when considering conservation actions. Circle all that apply.

   1 LIBRARIES
   2 NEWSPAPERS
   3 ENERGY MAGAZINES
   4 UTILITY COMPANIES
   5 OTHER (PLEASE SPECIFY _______________________

The problems associated with this kind of format include: 1) the respondent probably has been circling only one response in previous questions and may miss this new instruction, 2) you can't be sure the respondent has addressed every item in the list, and 3) you can create coding work for yourself since each item is really a "yes" or "no" and must be recoded before being given to a keypuncher or otherwise entered in a computer. The following example is an alternative way of asking this type of question:

There are a variety of information sources available about energy conservation. Which of the following has been a source of information for you when considering conservation actions. Circle one number for each source of information.

YES, A SOURCE    NO, NOT A SOURCE

   a. Libraries. . . . . .  1  2
   b. Newspapers . . . . .  1  2
   c. Energy magazines . . .  1  2
   d. Government agencies. .  1  2
   e. Rich's Newsletter. . .  1  2
   f. Utility companies. . . .  1  2
   etc.

(Note the spacing of the last example. The list of conservation actions is grouped into threes to avoid confusion in selecting the appropriate response number.)
Items in a Series

Items in a series can be presented in tabular form, rather than repeating the response categories under each individual item. This example has an introductory sentence that serves as an "umbrella" for the items listed:

Some households decide that certain conservation measures make more sense than others. Please indicate for each of the actions listed below whether your household has taken the conservation action, plans to take it in the future, has decided definitely not to do it, or is undecided. Please circle one number for each action, and also give the month and year for those actions you have already taken.

<table>
<thead>
<tr>
<th>HAVE</th>
<th>WHEN?</th>
<th>PLAN</th>
<th>DECIDED</th>
<th>UNDECIDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>DONE</td>
<td>MO./YR.</td>
<td>TO DO</td>
<td>NOT TO DO</td>
<td>UNDECIDED</td>
</tr>
<tr>
<td>a. Set back thermo-stat(s) for space heating</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b. Closed off some rooms</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c. Had an energy audit performed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

(In this example, the mo./yr. category is included so the evaluator can determine if the action was taken before or after the respondent participated in the energy program.)

Another example uses a series of items, but in a different format:

To what extent do you refer to each of the following sources of information for help on your project work?

(Please circle your answer)

<table>
<thead>
<tr>
<th>(Please circle your answer)</th>
<th>A GREAT DEAL</th>
<th>SOME</th>
<th>A LITTLE</th>
<th>NONE AT ALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Project manuals ..........</td>
<td>GREAT</td>
<td>SOME</td>
<td>LITTLE</td>
<td>NONE</td>
</tr>
<tr>
<td>b. Project record books ......</td>
<td>GREAT</td>
<td>SOME</td>
<td>LITTLE</td>
<td>NONE</td>
</tr>
<tr>
<td>c. Adult 4-H leader ..........</td>
<td>GREAT</td>
<td>SOME</td>
<td>LITTLE</td>
<td>NONE</td>
</tr>
<tr>
<td>d. Club teen leader ..........</td>
<td>GREAT</td>
<td>SOME</td>
<td>LITTLE</td>
<td>NONE</td>
</tr>
<tr>
<td>e. Club project meetings .....</td>
<td>GREAT</td>
<td>SOME</td>
<td>LITTLE</td>
<td>NONE</td>
</tr>
<tr>
<td>f. County Extension staff .....</td>
<td>GREAT</td>
<td>SOME</td>
<td>LITTLE</td>
<td>NONE</td>
</tr>
</tbody>
</table>
Attribute Categories

If you plan to collect data relating to attributes (personal characteristics, descriptive data) such as age, education, income, etc., it's often a good idea to use response categories which can be compared to already existing data. One rather self-evident example would be categories used to collect data in a previous study with which you'll be comparing your data. Another example, perhaps not so obvious, is using the same categories as used in reporting U.S. Census data. Your data can then be used to demonstrate the degree to which your sample reflects the general population.

Even if you have no comparisons currently in mind, collecting this type of information about your respondents can contribute to a "data bank" relating to various aspects of Extension program participation. Accumulating such data allows you to build a "participant profile" describing participants in terms of key variables, compare the characteristics of those who participate and those who don't, assess the degree to which target audiences are being reached, and plan strategies for effectively promoting future programs.

Here are a few tips for collecting such data:

- **Avoid overlapping categories.** You've probably seen these in questionnaires you've tried to fill out. Question: What is your age? Response categories: Under 25, 25-35, 35-45, etc. If you happen to be 25, 35, or 45, you're caught in a bind. This dilemma has an obvious solution of course. Simply use exclusive categories, i.e., 25-34, 35-44, 45-54 etc.

- **Ask age questions directly, but diplomatically.** "How old are you?" is a little blunt when asked of adults. "What is your age?" softens the request a little and "Please circle the number of the category which includes your age" is quite inoffensive. If you need more precisely refined figures, you could ask "What was your age at your most recent birthday?" (Most people hope they haven't yet celebrated their last birthday.) Also avoid asking for a month and/or year of birth unless it's absolutely necessary. Doing so will mean a lot of computations for you to do later.
- Phrase income questions carefully. Do you want to know annual income? Monthly income? Net? Gross? Taxable? Take-home? Of the respondents? Of the household? Some people are sensitive to income questions. Instead of asking "What was your total household income in 1992?:, you could more subtly ask "Which of the following categories best describes your total household income for 1992?" Offer a choice of several broad categories of dollar amounts.

- Use appropriate employment categories. Employment status is one attribute which has caused many a headache in evaluators trying to come up with descriptive response categories. The following example offers a solution (4): (The respondent is asked to read the entire list, then select the one response which best describes his/her employment status.)

- a. Employed full-time in the work force
- b. Employed part-time in the work force
- c. Employed full-time as a homemaker
- d. Employed as a homemaker and part-time in the work force
- e. Unemployed and seeking work
- f. Unemployed and not seeking work
- g. Student, employed part-time
- h. Student and not seeking work
- i. Retired, employed part-time
- j. Retired and not seeking work

Note that this listing offers a means for homemakers to be recognized and described as employed full-time, distinguishes between unemployed people seeking work and those not seeking work, and takes into account the fact that many students and retired persons are also employed part-time. Consider these options if you want to collect specific employment information.
Once the questions are determined, a series of decisions must be made on the questionnaire format - its appearance, length, and the order in which the questions will be listed. Included in this section is a list of guidelines for assembling a questionnaire followed by a discussion of specific format issues.

- The questionnaire should have an attractive, professional look, with quality print in an easy-to-read type face.

- In mailed questionnaires, begin with an introduction reinforcing points that were made in the cover letter (purpose of the survey, confidentiality, etc.).

- Provide directions on how to answer the questions. Use the same marking system (circling, checking, Xing) for answering questions wherever possible. Circling numbers assigned to response categories is often recommended when data will be entered in a computer. This will save time and money since data can be entered directly from the questionnaire without recoding the responses.

- Some experts suggest that questions should be distinguished from answers through the use of lower and upper case letters. For example, use a combination of upper and lower case letters in questions and only upper case letters in answers (see examples on previous pages).

- List response categories vertically as much as possible to prevent the error of checking an answer on the wrong side. For example:

  1. Outstanding
  2. Satisfactory
  3. Fair
  4. Poor

- Avoid forcing respondents or interviewers to turn the page in the middle of a question or between the question and the response categories.

- Write transitional statements between topical areas of the questionnaire to enhance the flow and continuity. Avoid biased lead-ins, demanding tones, or cryptic commands. Try instead for an easy, conversational, informal manner.

- Pre-code the items and response categories as much as possible to help facilitate data tabulation and analysis. (See Chapter 5, Analyzing the Data, for specific advice.)

- Include the due date and the return address on written questionnaires in case respondents misplace the cover letter or envelope.
Organize your items in a logical manner - logical to the respondent, not necessarily to you. Cluster together those questions that are similar in content or follow a certain line of thought. Begin with a question that is likely to be viewed by the respondent as interesting or most useful to the purpose of the survey.

Keep the first questions easy - respondents who have a positive experience on the first few questions are more likely to become committed to finishing the questionnaire. Do not begin with attribute questions (age, education, income, etc.) unless they address the major purpose of your survey. If you do a good job of selling the importance of your evaluation in the cover letter or telephone introduction, then launch into personal questions, the respondent can easily lose any enthusiasm you might have generated.

Also, some respondents are reluctant to give personal data. If these items appear at the end of the questionnaire, respondents will already have developed a commitment by the time they get there, and be more likely to provide the information.

Recommended lengths for a questionnaire vary by the method of data collection. Some personal interviews require an hour or so for completion and yet a high rate of completion is still probable. Telephone interviews, mailed questionnaires, and questionnaires used in a group setting should require far less time to complete. For mailed questionnaires, consider the appearance of the questionnaire (is the length intimidating to the respondent?), as well as the estimated time of completion (some very short questionnaires can require a long time to complete).

Some tips relating to specific format issues are outlined on the following pages. They include:

- Validation questions.
- Filter or screen questions.
- Mail vs. telephone formats.
A "validation" item at the beginning of a questionnaire is suggested by Bennett (1) as a way of setting the stage for the rest of the questions, as well as confirming that you and the respondent are referring to the same program. Such an item briefly identifies and summarizes the program's activities:

The Clover County 4-H Livestock Program conducted by the Extension Service includes educational content and a variety of activities designed to contribute to the growth and development of youth. In addition to showing and selling their animals, members participate in county-wide activities such as livestock judging contests, public presentations, fitting and showing clinics, and special sessions on management, feeding, and carcass evaluation. Members also participate in their neighborhood 4-H clubs which have programs and field trips relating to livestock subject matter. The Clover County Fair and the State Fair in Emerald also offer experience for members.

Is this account of the Clover County 4-H Livestock Program:

1  ACCURATE AS FAR AS I KNOW
2  REASONABLY ACCURATE
3  NOT ACCURATE
4  DON'T KNOW

If appropriate to your study, you could follow up by asking the extent of the respondent's participation in each of the activities mentioned: Of all the activities in this program, in which were you personally involved and to what extent? (Followed by a listing of activities and response categories concerning extent of involvement.)
Filter or Screen Questions

Some questions you want to ask may not apply to all respondents. To guide the respondent (or interviewer) in handling this situation, Dillman (5) suggests using arrows from particular response categories to special sections requesting more information. Examples:

10. As a result of being a 4-H leader, have you learned any information which has helped you in being a parent?
   1 NO
   2 YES
   3 DON'T KNOW
   ▶ 10a Briefly describe the information learned and how it helped you:

14. Do you own or rent the home in which you now live?
   1 OWN HOME
   2 RENT HOME
   ▶ (If you rent)
   14a How much is your monthly rent?
      1 LESS THAN $100
      2 $100 to $199
      3 $200 to $299
      4 $300 or more
   ▶ IF YOU OWN YOUR HOME, SKIP FROM HERE TO QUESTION 16

16. How often do you talk to others about what you read in Rich's newsletter? (Circle one number.)
   1 NEVER
   2 ONCE IN AWHILE
   3 QUITE OFTEN
   4 VERY OFTEN
   ▶ 16a With about how many people?
      NUMBER OF PEOPLE
Mail vs. Telephone Formats

Different formats for mail and telephone questionnaires are recommended by some survey experts, to capitalize on differences in how each will be used. It's not essential that you follow one of these formats, but it's easy enough to do and makes a lot of sense. Check out the examples below, based on formats developed by Dillman (5), and use your own judgment.

Note that in the mail format, both the questions and the response categories are numbered along the left margin. In the telephone format, the questions are numbered on the left margin, but the response categories are numbered on the right margin.

This is the reason: When respondents fill out a mail questionnaire, it's easier for them to see the numbers they are to circle (or blanks to check) if those numbers are placed directly in front of each response choice. In an telephone, the interviewer will quite often be recording the response to one question while asking the next question. With the response categories on the right margin, the interviewer's hand does not cover the wording of the questions during the interviewing process. (Assuming, of course, the interviewer is right handed.)

Also notice that in the telephone format, all copy to be read by the interviewer is in upper and lower case type. Instructions and response categories which are not to be read are in upper case type only. In the mail format, all questions are in upper and lower case and all response categories are in upper case only.

- Mail format:

5. What was the total combined income of your household in 1983, before taxes? Your best estimate is fine. (Circle one number)

1 UNDER $5,000
2 $5,000 TO $9,999
3 $10,000 TO $14,999
4 $15,000 TO $19,999
5 $20,000 TO $29,999
6 $30,000 TO $39,999
7 $40,000 TO $59,999
8 $60,000 OR MORE

- Telephone format:

5. And, what was your total combined household income in 1983, before taxes? Just your best estimate is fine. (INT: READ LIST IF NECESSARY)

UNDER $5,000 ...... 1
$5,000 - $9,999 .... 2
$10,000 - $14,999 .. 3
$15,000 - $19,999 .. 4
$20,000 - $29,999 .. 5
$30,000 - $39,999 .. 6
$40,000 - $59,999 .. 7
$60,000 and over .. 8
COVER LETTERS/TELEPHONE INTRODUCTIONS

The first contact with the respondent not only should introduce the evaluation project, but motivate the respondent to participate. Important messages are these:

- The purpose of the evaluation.
- Who is conducting the evaluation.
- How the evaluation will benefit the respondent (and perhaps the community and/or society in general).
- What will be expected of the respondent (fill out a questionnaire, participate in an interview, etc.).
- The importance of the respondent to the success of the study.
- How or why the respondent was selected.
- A promise of confidentiality (not anonymity).
- An offer of a summary of the results (only offer if you are prepared to do so).

With a mail questionnaire, include a reference to the stamped (or franked) envelope enclosed to make return of the questionnaire easy. Also call attention to the due date for returning the questionnaire. Since the respondent will likely notice the identification number of the questionnaire (if used), it's a good idea to explain why the number appears (to identify who returns the questionnaires so their names can be removed from the mailing list - those who return questionnaires will not be imposed upon by follow-up mailings). An example of a cover letter for a mail questionnaire appears on the following page.

If at all possible, individually type the name and address on the letter, with the respondent named in the salutation. Further personalize by adding a real signature. Dillman (5) even advises placing each letter on a soft surface and signing with a blue ball point pen, using enough pressure to make an indentation in the paper so the respondent will know it was made by a real person!

Remember that mail questionnaires require follow-up to increase participation. This means that you will need to prepare more than one cover letter, as well as any reminder post cards you plan to send.

Cover letters are expected with a mail questionnaire, but respondents for interviews may also be first contacted by mail to notify them that they'll soon be called and why (to participate in a telephone interview or schedule a time for a face-to-face interview). You may or may not want to include a copy of the questionnaire to prepare the respondents for the interviews. A sample letter alerting respondents to an interview call is on the next page.
Mrs. Rhoda Dendrun
204 Avery Park Place
Corvallis, OR 97333

Dear Mrs. Dendrun:

The Oregon State University Extension Service is sponsoring a study of the 4-H Clothing project. Our purpose is to determine the project's effectiveness in teaching youth about clothing selection and construction.

You are part of a random sample of 4-H parents being asked to give your opinions. Since you are a vital part of our cross-section of parents, your participation is essential to the accuracy of our study. We will not be able to substitute someone else if you do not participate.

You can help by filling out the enclosed questionnaire. It is prepared so it can be easily returned. Please use the enclosed return envelope; no stamp is needed. We would appreciate receiving your completed questionnaire by August 15.

You will see that your questionnaire is numbered. This number is to provide a way by which reminders can be sent, if necessary, without further imposing on those who have completed and returned their questionnaire. When your questionnaire is returned, we'll use the identification number to check your name off the mailing list. Your name will never be placed on the questionnaire and your responses will not be linked to your name in any way. All the information you give us is strictly confidential.

The results of our study will be used to help document the effectiveness of the 4-H program and to plan for any changes in the 4-H Clothing project. If you would like a copy of our study report, please enclose a self-addressed envelope with your questionnaire. (We will pay postage.)

We realize this is a busy time of year and thank you for your interest and help. If you have any questions, please call or write me.

Sincerely,

Beverly Smith
County Extension Agent

Mr. Ben Tyger
Winston, OR 97495

Dear Mr. Tyger:

Within the next two weeks someone from the Douglas County Extension office will be calling you as part of a county-wide study to determine the effectiveness of our 4-H program.

We are writing in advance of the telephone call because we've found that many people appreciate being advised that such an effort is underway and that they will be called.

When the interviewer calls, he or she will ask to interview you. The interview should take only about 15 minutes and your responses will be kept confidential. If the call comes at an inconvenient time, please tell the interviewer and he or she will be happy to call back.

Your help is essential to the accuracy of our study because you are one of only a limited number of county 4-H leaders selected as part of a random sample. Such a sample means that we are not able to substitute someone else if you do not participate.

We feel certain that our 4-H program is of great value to both youth and adults in our county. Your response will be very important if the program is to be continued - in the face of increasing competition for public funding it will help us document more fully the value of our program to the whole county.

If you have questions, please don't hesitate to ask our interviewer. Or, you may contact me by phone at 756-0432, or by mail.

Sincerely,

Karl Krepsbach
County Extension Agent
In cases where the initial contact is by telephone, the interviewer will need to verbally express all the needed information. In the RAP approach to collecting data in telephone interviews, Bennett (1) suggests the following wording after the interviewer verifies he or she is talking to the right person and has introduced him/herself:

Extension's success depends on meeting people's information and assistance needs. We are interviewing people who have been in contact with the ____________ program. By finding out how participants have been affected by this program, we expect to find ways for Extension to do a better job.

We are contacting all the people who participated (or we selected your name through a chance drawing from a list of participants in the ____________ program) during the ____________ (time period). None of the information you give us will be released in a way that will identify you. Do you have questions before we begin?
PILOT TESTING

Pilot testing a questionnaire or other method of gathering data can save many later headaches. Unfortunately, many people consider pilot testing nothing more than a ritual if they consider it at all. However, the time you save by not pilot testing is usually more than made up by trying to salvage data from instruments that weren't pilot tested.

The pilot test helps you find out if the content and form of the questions are satisfactory. You can also get information about:

- How long it takes to fill out the questionnaire (or do an interview).
- Whether the order of the questions flows well, without losing or confusing the respondent.
- Whether ample space is provided for responses.
- Whether the directions, as well as the questions, are understood.

Another advantage to pilot testing is the opportunity to check the responses you get against the major evaluation question or issue you're exploring. Are patterns beginning to emerge? Are there identical responses showing up in the "Other (Please specify)" blanks that you might want to include as a specific category in the next draft?

When you pilot test, have your data analysis plans already in mind. By playing around with the data you get in the pilot testing you can begin to see if those plans are on target.

Try your questionnaire on people who resemble your program participants. Test under conditions similar to those you'll be using in gathering your data. For example, when pilot testing a mail questionnaire, have people answer it without help from you. When they are finished, ask for opinions and suggestions. Check out an interview questionnaire by having an actual interview, either by phone or face-to-face, depending on how it will be used.

Before pilot testing, ask some of your colleagues to review the questionnaire, particularly those who have interest or experience in evaluation or who may be familiar with the program or audience you're examining.

Sometimes evaluators get so close to their work they can't see the forest for the trees. A reviewer can help out by taking a fresh look from a more distant perspective. This doesn't mean that you need to accept everything a reviewer says. Consider the comments carefully. Are they on target? Do they point out real faults or merely suggest a different approach?
A good questionnaire is seldom drafted in one sitting, or even two. (Some professionals in the survey business often test and revise 10-12 times before sending a questionnaire to the printer!) How widely you test your questionnaire, and how often you revise it, will depend on:

- The importance of your study.
- The degree of precision you need.
- How well the instrument seems to be working.
- The amount of time and effort you can afford to spend.
SELECTING AND TRAINING INTERVIEWERS

If your evaluation involves interviewing to collect data, you'll need to consider:

- How many interviewers will be needed?
- Who will do the interviews? Program volunteers? Other interested volunteers, but from outside the program being evaluated? Will data be more credible to the users of your evaluation report if the interviewers are from outside the program (or outside Extension)? How are the interviewers likely to be perceived by the respondents? What resources (people and money) are available to you?
- How much and what kind of training will interviewers need?

As you recruit and select interviewers, be sure they have a clear picture of what their responsibilities will be and the amount of time involved. General qualities to look for in interviewers are the ability to think on one's feet, a pleasant manner, a well-modulated voice, and legible handwriting. It's also important that each interviewer has the confidence needed to contact people and pose questions to them.

Essential to the success of your study is an orientation and training program, with opportunities for interviewers to learn about the study and practice interviewing skills. If you'll be using more than one interviewer, train all interviewers together if possible to try and achieve a situation where all interviewers will be on the same wavelength in asking questions and recording responses.

An effective way to do this is to assemble all interviewers and an "interviewee" together. The interviewers then pose the questionnaire items in round-robin fashion while recording responses without questions or comments. Finally, the interviewers compare their responses and reconcile discrepancies, using the interviewee to explain what he or she meant only when no consensus is achieved.

At the very least, interviewers should:
- Understand the purpose of the study.
- Be thoroughly familiar with the questionnaire.
- Understand the importance of
  - Interviewing only those people who are part of the sample (no substitutions).
  - Asking questions exactly as written.
  - Remaining neutral to respondents' answers or comments.
  - Recording responses completely and accurately.
As part of the training, be sure to prepare interviewers with some "canned" responses to general questions he or she is likely to get from respondents, such as: "Who's paying for this study?", "Why do you need to know ______?", "Why don't you talk to my husband (wife/son/daughter/etc.)?".

Also include advice on how to handle situations where:

- A respondent, contacted by telephone, is rude. (Be nice, ease off, and if the rudeness persists, say "thank you", and quietly hang up.)

- The interviewer thinks the respondent may have misunderstood the question: "I'm not sure I read the question correctly, so I'm going to read it again to make sure" or "Let me read the question again, and your response, to make sure I've got it right."

- The respondent refuses to participate for various reasons including:

  - **Too busy** - "Sorry I caught you at a bad time. When would be a good time for me to call back in the next couple of days?"

  - **Illness** - "I'm sorry to hear that. I'd be happy to call back in a day or so if it's OK?"

  - **Respondent feels he or she won't be able to answer the questions** - "The questions aren't at all difficult. Other people have expressed the same concern at first, but found they didn't have any difficulty after we got started. Why don't I just read a few questions and you can see what they're like. The first one is ______."

Telephone interviews are usually most successful in the evening, when most people are home. Interviewers should not be intrusive, but offer to call back at a more convenient time if necessary. Two or three interviews per evening is a realistic target for most interviewers.

Because of economic considerations you'll likely find yourself working with untrained interviewers in your evaluations, rather than paid professional interviewers. But regardless of experience, all interviewers require a certain amount of training for specific evaluation projects. Almost invariably, the length of time that can be devoted to training is limited - this necessitates careful planning and efficient use of time. Fessenden (6) recommends a minimum of six hours and suggests the agenda on the next page.

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Training is essential! Allow no one to interview without participating in a training session.
TRAINING INTERVIEWERS
Sample Agenda

1. Why we are here:
   - Greetings and introductions.
   - Purpose of the meeting.
   - Explanation of day’s plans.
   - Background of the evaluation.

2. What an interviewer does:
   - Importance of the interviewer as part of the evaluation team.
   - Definition of terms (respondent, sample, refusal, call-back, and other terms to be used).
   - The sampling plan; what it is and how to follow it.
   - Detailed explanation of questionnaire, item-by-item with opportunities for questions and discussion.
   - General set of instructions for interviewing. (Have a handout, but discuss in detail. Ask for questions and clarify.)
   - Specific instructions for asking questions. (After a general statement regarding techniques of asking questions, use the items in the questionnaire to show how to ask properly. Also show suitable forms of approaching the respondent and ending the interview.)

3. Practice session. Interviewers pose questions to an “interviewee” in round-robin fashion while recording responses without questions or comments. The interviewers compare their responses after the interview is finished, reconciling discrepancies by letting the interviewee explain what he or she meant only when no consensus is met.

4. Explain special procedures:
   - How to identify respondents; make contacts; arrange for interviews; deal with refusals, not-at-homes, and call-backs.
   - When and where to bring completed questionnaires.
   - Who to contact (and how) for further instructions or help in dealing with unexpected or unusual situations.

5. Make first assignments for interviewers.

6. Set time for general meeting at end of first day of interviewing to discuss problems, clear up questions, and check on quality of work.

7. Summary of day’s activities; final questions.

8. Closing words of encouragement, assurance, and morale boosting.

*aAdapted from Fessenden (6). One departure is item 3, where a “round-robin” is proposed to substitute for Fessenden’s suggestion that interviewers pair off and take turns asking and answering questions. The round-robin technique offers an opportunity to build in interviewer consistency.*
SAMPLING

The most precise way of measuring the perceptions, behaviors, or characteristics of a particular group of people is to collect information from all members of the group. If the group you want to examine is relatively small, such an approach is very manageable. However, as the size of the group increases, it often becomes impractical, if not impossible, to collect information from everyone.

To help us (or some would say, confuse us) a variety of procedures have been developed which allow us to sample part of a group, then generalize our findings to the whole group, also called "the population". "Random" sampling means that everyone in the group has an equal chance of being selected. The goal is to select a sample that can be considered as representative of the population.

Several ways of selecting samples are presented on the following page. To use any one of them you'll need a list of program participants arranged in some systematic way (alphabetical order, for example). For stratified sampling, an extremely useful technique for building in representativeness, you'll need to sort the names into subgroups before arranging them in order.

What size should a sample be? Large samples are usually thought to be more accurate than small samples, other things being equal. Most experts advise using as large a sample as you can manage given your resources and time frame, but caution that how you select a sample is perhaps more important than the number selected. Bennett suggests that the answer partly depends on the number of people involved and offers this comfortable rule of thumb:

- If there are fewer than 40 people in the entire group, include them all in your evaluation.
- If there are 40 or more people in the entire group, draw a random sample of perhaps 35-40 people.

The size of sample should also allow for non-response - cases where people selected choose not to participate, have moved away, or died (the ultimate refusal). If you draw a 50% sample from 200 people and only 40 people out of 100 respond, your "sample" is now only 40%. Prepare for this possibility before drawing your sample by estimating the number of people you feel will probably respond (60%, for example). If you want to end up with about 100 respondents, figure out how many names you'll need to draw (60% of X = 100). In this case, the answer is 170 names (60% of 170 = 102).

And finally, the size of your sample should depend on:

- The extent of possible variance to be found in your data - the greater the extent to which your respondents are apt to differ from one another, the larger the sample you need.
- The degree of precision needed in terms of statistical accuracy - there are specific statistical procedures for considering sampling errors and levels of confidence if precision is absolutely necessary.
- Your plans to analyze the data collected.

If you have a complex sampling situation, consult a sampling expert. For most evaluations, sampling procedures outlined on the next page will be adequate.
SAMPLING TECHNIQUES

To use any of the techniques below, you must have as complete a list of names as possible, arranged in some systematic way (alphabetically, for example) and numbered in sequence. For stratified sampling you will need to sort the names into subgroups before arranging and numbering.

Simple random sampling - Write numbers (1, 2, 3, 4 etc., depending on the number of people on your list) on slips of paper and put into a container. Draw out a number, find that number on the list of names and circle it. Continue drawing numbers until you have identified enough people to serve as your sample.

Table of random numbers - Such tables are in the backs of statistics books and list columns of numbers which have been randomly selected, usually by computer. To determine where to "enter" the table, select two digits by chance (for example, the first two digits of the serial number on a dollar bill from your pocket or on the license plate of the first car you pass on the way to work). After locating the entry number on the table, follow the column rows and choose names corresponding to the numbers shown.

Systematic sampling - In this procedure every --th name is selected from your list. If the list contains 500 names and you want to draw a sample of 50, take every 10th name. Select the number for the first name by chance (see above suggestions for table of random numbers - dollar bill and license plate).

Stratified sampling - The entire group is divided into subgroups, then samples are randomly selected from each subgroup. This technique improves accuracy when you want to build in representation of certain important subgroups. Suppose you plan to survey 4-H members enrolled in the clothing project to find out what they’ve gained from their project experience. You might want to stratify your sampling by age or grade so junior, intermediate, and senior members are represented proportionally:

<table>
<thead>
<tr>
<th>Grades 4-6</th>
<th>Grades 7-9</th>
<th>Grades 10-12</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number enrolled</td>
<td>90</td>
<td>72</td>
<td>38</td>
</tr>
<tr>
<td>% of total group</td>
<td>45%</td>
<td>36%</td>
<td>19%</td>
</tr>
</tbody>
</table>

In this instance you would randomly select 45% of your sample from a list of clothing members in grades 4-6, 36% from grades 7-9, and 19% from grades 10-12. Notice that this procedure requires information about the total group (in this case, grade level) so a separate listing can be made for each subgroup.
ANALYZING THE DATA

The words "data" and "analysis", when used in the same sentence, have been known to strike fear and trembling in even the most dauntless Extension professionals.

Some remember painful statistical struggles during their campus days; others recall horror stories of unfortunate colleagues buried alive under their own data.

The following advice may be of considerable comfort to those of you with similar feelings: Choose data analysis procedures that will

- effectively communicate your findings and

- that you can understand and are comfortable with and

- that your target audience will understand and be comfortable with.

If you've done your homework, there's an excellent chance you'll find that both you and your target audience are on the same wave length. (That's one of the reasons for selecting the target audience before you begin the study - to avoid a mismatch.)

This chapter examines simple statistical techniques to use in analyzing your data, as well as methods of coding and tabulating the questionnaire responses in preparation for the analysis.

SIMPLE STATISTICS

Statistics are used to reduce large amounts of information to manageable and understandable totals. The following simple math techniques are within the capabilities of every Extension professional and are perfectly respectable ways of analyzing and presenting data. In statistical jargon they're usually referred to as "descriptive" techniques.

Numerical counts. For some items it may be enough to know "how many?". How many of the respondents were in each age group? How many 4-H leaders are also parents of 4-H members? Another example: A six-month follow-up survey of a 4-H Clothing Resource Leader Workshop in Oregon found that the 90 respondents had shared workshop information with a total of 3,105 people. Their audiences included 1,705 4-H leaders, 712 4-H members, and 688 other individuals (family, friends, study group members). Numerical counts also serve as a base for other calculations which may be more meaningful.
**Percentages** - This computation is used to clarify relationships and comparisons. For example: a relationship such as 63 out of 176, compared with 36 out of 62, is more difficult to grasp than 36% compared with 58%. Remember to:

- Use the right base (denominator or divisor in mathematical terms) for your calculations. Also, your audience will need to know which base you used - does "74%" mean 74% of the participants in the total program, 74% of the participants sampled, 74% of the respondents answering the question, or 74% of the respondents to whom the question applied.

- Round off percentages to the least number of decimal points needed to communicate your findings. Rounding off to one decimal point (18.76% to 18.8%, for example) will suit the purposes of most evaluations. Use more decimal points only if a greater degree of precision is needed. Too many decimal points can give an exaggerated sense of accuracy and make your data difficult to read and understand.

**Arithmetic means** - These are what most people think of as "the average". Easy to calculate and easy to understand, means are probably the most commonly used measure in data analysis. The mean is the sum of the values of a set of responses, divided by the number of responses in the set.

Not only can the mean be calculated for an item using "real numbers" (The 90 respondents shared workshop information with a total of 3,105 people, an average of 35 people per respondent.), but it can be used in summarizing findings from items in a series. Example:

On a scale of 1-5 (where 1 = "not at all helpful" and 5 = "very helpful"), respondents rated the program...

Gave me practical information I can use at work ... 4.8
Increased my understanding of the subject ... 4.6
Stimulated me to find out more about the subject ... 4.3

(To calculate, multiply the number of "not at all helpful" responses x 1, the "slightly helpful" responses x 2, etc., then divide by the total number of responses.)
The **range** - This measure shows the spread of responses in the simplest way possible. Although it's based on extremes (the difference between the top and the bottom), it's often meaningful to report along with other data. Example using information from an energy workshop:

4-H members reported a total reduction of 15,000 kilowatt hours during December and January, months of peak-energy use. This reduction resulted in an average savings of $30 per family for the two-month period. Savings for individual families ranged from $5 to $70 per month.

**Rankings** - These are meaningful to most people, although there is a tendency to interpret them as measurements rather than as evidences of sequence. Sometimes it's easy to forget that only minimal differences may separate items that are ranked. Use carefully, with full explanations.

Example combining percentages with ranking to indicate magnitude of differences between ranked items:

<table>
<thead>
<tr>
<th>INFORMATION FOUND &quot;MOST USEFUL&quot; BY RESPONDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
</tr>
<tr>
<td>Construction techniques</td>
</tr>
<tr>
<td>Textiles, fabric analysis</td>
</tr>
<tr>
<td>Resources available, sharing ideas</td>
</tr>
<tr>
<td>Garment style analysis</td>
</tr>
<tr>
<td>Project revision overview</td>
</tr>
<tr>
<td>Growth and development of youth</td>
</tr>
</tbody>
</table>

*aThe sum of percentages exceeds 100 since participants could give more than one response.*

If you're comfortable with more complex analysis techniques, by all means use them, keeping in mind their suitability to your data and appropriateness for your audience.

If you're interested in more advanced analysis (or being challenged to do more complex evaluation), but lack the experience, it's perhaps best for you to seek the advice of someone who is experienced and can help you select appropriate techniques.

Regardless of your experience or interest in data analysis, the time to plan your analysis is **before** the data are collected.
CODING THE RESPONSES

Coding is the process of assigning numbers to the response categories for each item in the questionnaire. The code allows the collected data to be recorded, summarized, and analyzed. Whether you use a computer or hand tabulation in analyzing your data, the basic coding process is the same.

For some questionnaire items, coding is easy. For example:

1. What is your age?
   1. Under 25 years
   2. 25-29 years
   3. 30-34 years
   4. 35-39 years
   etc.

With this type of numbering system, an "under 25 years" response could be coded as "1", "25-29 years" could be coded as "2", "30-34 years" could be coded as "3", and so on.

The item in the above example is pre-coded - the numbers are assigned to the response categories when the questionnaire is written. You can see the advantage of using a 1, 2, 3, etc. system of identifying your response categories, rather than using an a, b, c system which later needs to be translated into numbers.

Suppose that you structure the above item a little differently:

2. What is your age? ______ years

The number of years could then serve as the code - "35 years" could be coded as a "3" and a "5". (For computer entry, two columns or spaces would be needed to record the two digits in the responses.)

The key to coding lies in your planned analysis. What do you intend to do with the data? If you want to calculate a mean age to describe your participants ("The average age was 32 years."), you need to collect the data in actual years (Example 2). If you want to report the participants' ages in terms of a distribution ("40% of the respondents were under 35 years of age."), using categories (Example 1) suits your purposes.

You could, of course, collect the data in actual years (Example 2), code it later into categories (Example 1), and report both a mean and a percentage distribution. You can see why it's important to know how you are going to analyze your data before you design your questionnaire.
Items in a series can be coded before or after the questionnaires have been filled out. In either case, figure out the coding system before you collect the data. Here are two examples:

1. What, if any, influence did your participation in 4-H have on . . .

(Please circle your answer)

<table>
<thead>
<tr>
<th>None</th>
<th>A Little</th>
<th>Some</th>
<th>A Great Deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuing your education beyond high school . . . . . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Your choice of job/career . . . . . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Your choice of college to attend . . . . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

2. To what extent do you feel your participation in 4-H contributed to your personal development in each of the following areas?

(Please circle your answer)

<table>
<thead>
<tr>
<th>None</th>
<th>A Little</th>
<th>Some</th>
<th>A Great Deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop personal pride in achievements and progress . . . . . . .</td>
<td>None</td>
<td>Little</td>
<td>Some</td>
</tr>
<tr>
<td>Acquire skills necessary for employment . . . . . . . . . . . . .</td>
<td>None</td>
<td>Little</td>
<td>Some</td>
</tr>
<tr>
<td>Develop skills to effectively assume leadership roles . . . . . . .</td>
<td>None</td>
<td>Little</td>
<td>Some</td>
</tr>
</tbody>
</table>

In the first example, the responses would be coded as "1", "2", "3", or "4", depending on the number circled by each respondent. In the second example, coding numbers would be assigned before the data were collected ("none" = 1, "little" = 2, "some" = 3, and "great" = 4), but would not appear on the questionnaire. The first example is appropriate for either a mail or telephone questionnaire; the second example is more appropriate for a mail questionnaire. (Putting the numbers directly on the questionnaire will save coding work; there is no advantage to using the "word" responses in a telephone interview.) Both examples have ordered response categories, where the highest number in the series is usually assigned to the category representing the "highest", "best", or "most", particularly if mean ratings are to be calculated and compared. Both numbers and means are easier for most people to understand when higher numbers reflect higher or more positive ratings.
Open-ended items relating to participant opinions, suggestions, and comments are usually coded after the questionnaires have been filled out. Determining categories after seeing what kinds of responses you get is often difficult and time-consuming (a good reason to limit the number of open-ended questions you include).

Sometimes, however, categories for open-ended questions are determined before the data are collected. For example, in a six-month follow-up survey, participants in a 4-H Clothing Resource Leader Workshop were asked to identify the "most useful" information they had learned. Responses to the open-ended question were sorted into categories corresponding to workshop subject matter content: textiles and fabric analysis, garment style analysis, construction techniques, growth and development of youth, and clothing project overview. The coding did not appear on the questionnaire, which was mailed, but could easily have been included on a questionnaire used in an interview.

Coding should also take into account "missing data". Missing data occur when a respondent to a mailed questionnaire leaves an item unanswered, when a respondent in an interview declines answering a question, or when an interviewer forgets to ask a question. In such cases, a "no response" category, usually coded "0" or "9" is established. It is printed as a response category on telephone questionnaires, but not on mail questionnaires. After mail questionnaires are returned, "0" or "9" is written in wherever appropriate on individual questionnaires.

Do not use "0" or "9" to identify missing data for items in which you're asking for real numbers ("What is your age?") or when you're using "0" or "9" as a code for other responses. If you do, you won't know whether "0" or "9" mean "missing data" or whether they mean "none", "nine", or another response. In such cases missing data can be coded by entering a letter (a, b, c, etc.) or a number preceded by a minus sign (-9, for example).
TABULATING THE RESPONSES

Tabulating enters the picture after the data have been collected. It is the process of using the code numbers to record the answers of each respondent, so they can be summarized and analyzed. Tabulation can be done by hand or by computer.

Hand tabulation methods are: tallying on a blank questionnaire or tally sheet; recording responses on a tabulation sheet; or sorting questionnaires into piles.

A hand tally on a questionnaire might look like this:

1 Under 25 years I I I I
2 25-29 years I I II
3 30-34 years III I I I
4 35-39 years I I I I

etc.

This is probably the most common way of tallying responses for small samples. For items that are categorized after the questionnaires are filled out (responses to open ended questions, for example), a special tally sheet can be prepared. Here is an example:

<table>
<thead>
<tr>
<th>Workshop subject matter</th>
<th>Number of respondents identifying information as &quot;most useful&quot;</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textiles and fabric analysis</td>
<td>I I I I</td>
<td>16</td>
</tr>
<tr>
<td>Garment style analysis</td>
<td>I I I</td>
<td>12</td>
</tr>
<tr>
<td>Construction techniques</td>
<td>I I I I I I</td>
<td>27</td>
</tr>
<tr>
<td>Growth and development of youth</td>
<td>I I I I I I</td>
<td>5</td>
</tr>
<tr>
<td>Clothing project review</td>
<td>I I I I I I</td>
<td>10</td>
</tr>
</tbody>
</table>

Hand tallying is most useful when you have a relatively small amount of data. The biggest disadvantage is the likelihood of error and the difficulty of checking for error.

Tabulation sheets are similar to tally sheets, but the format differs. A simple tabulation sheet is outlined on the next page. The X's indicate the respondents' answers to each item. Totals are made by adding up the X's in each column. Entries are usually made with one person reading the responses and another person typing or writing them on the tabulation sheet. Although this method cuts down on errors, it can be very time-consuming to prepare the tabulation sheets and record the data, let alone total the responses.
Hand sorting is another technique that works quite well with small amounts of data. Questionnaires are sorted into piles corresponding to the response categories for a single item. The number of questionnaires in each stack is counted and the numbers are recorded. The questionnaires are then re-sorted into categories appropriate to the next item and counted. And so on. This method can be very cumbersome and confusing. It works best if you have a very short questionnaire (one page, for example).

Even though hand tabulating can be done very successfully with small amounts of data, it's no wonder than computers were greeted with enthusiasm by those whose lives are dominated by data.

Desktop computers are very efficient for analyzing data, but remember, first the data have to be entered. Check the availability and appropriateness of various software packages - spreadsheet programs or data base entry and management programs - to help you enter and analyze your data. Some software packages are now relatively inexpensive or readily available as cost-free shareware.

Such packages come with detailed instructions for coding and analysis. If you are not familiar with a program, be sure to allow plenty of time to work through it.

<table>
<thead>
<tr>
<th>Questionnaire number</th>
<th>Age</th>
<th>Continuing your education:</th>
<th>Choice of job/career:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>None</td>
<td>Little</td>
</tr>
<tr>
<td>1</td>
<td>29</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>37</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>32</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>27</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>44</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>19</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>35</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Totals: 7</td>
<td>223</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
INTERPRETING THE FINDINGS

After your data have been turned into frequency counts, percentages, means, and other measures, you finally come face-to-face with the big question: What does it all mean?

This leads to a discussion of data interpretation. Frequencies, percentages, and means, etc., are, after all, merely numbers. You are the one who is most familiar with these numbers and with all that happened in the program and in the evaluation. Your responsibility as an evaluator is to provide a context for these numbers, to give them meaning.

Suppose, for example, someone tells you the temperature outside is 28 degrees. What meaning does this piece of information hold for you? Would it help to know whether it is Celsius or Fahrenheit? What is the humidity? Is this temperature typical or unexpected?

The evaluator's job is not only to note the temperature, but to provide an interpretive framework - 28 degrees Celsius, 45% humidity, a typical July day in Portland, Oregon.

Interpretation helps describe, explain, compare, and (sometimes) predict. Without interpretation, the definition of evaluation - using information (evidence) to determine value or worth (judgment) - is not met.

EXAMINING THE EVIDENCE

Your evaluation findings rest solidly and completely upon a factual foundation - the data are the data. Build a base for your interpretation of the findings by looking at the summary of responses to each item in your questionnaire. Do you think a specific percentage is high? Low? Are there some unexpected findings? Do the responses to some items seem to link or cluster with responses to other items? If your program objectives express criteria to be met, is there evidence to show this happened (is happening)?

Look at the findings from different angles. Check for things that seem to fit together. Organize them into various kinds of charts, tables, graphs, lists, etc. to view them from differing perspectives. These don't need to be works of art - just doodle with the data. ("Doodling" not only helps you understand your findings better, but it begins to show you ways your findings can be most effectively communicated to others.)

You will likely want to follow-up your original analysis with some sub-sorting (also called "cross tabulation") to explore your findings further. For example, suppose you are doing a follow-up evaluation of a 4-H activity attended by intermediates (grades 7-9) and seniors (grades 10-12). The activity is offered
each year and members may attend more than once. You've collected data from 301 participants and one of the items reflects an overall rating of the activity, with response categories of "super", "good", "fair", and "terrible". Your first analysis of this item would likely be to take a look at the frequency distribution and perhaps calculate an average rating:

<table>
<thead>
<tr>
<th>Rating</th>
<th>Number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Super (x 4)</td>
<td>183</td>
</tr>
<tr>
<td>Good (x 3)</td>
<td>95</td>
</tr>
<tr>
<td>Fair (x 2)</td>
<td>21</td>
</tr>
<tr>
<td>Terrible (x 1)</td>
<td>2</td>
</tr>
<tr>
<td>Average rating</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Since the program tends to be somewhat similar from year to year you might wonder if those who have attended before might rate the activity differently than those who haven't. You can sub-sort your data, separating the "repeaters" from the "first-timers" (one of the items requested this information) and see what happens:

<table>
<thead>
<tr>
<th>Rating</th>
<th>First timers</th>
<th>Repeaters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Super (x 4)</td>
<td>125</td>
<td>58</td>
</tr>
<tr>
<td>Good (x 3)</td>
<td>60</td>
<td>35</td>
</tr>
<tr>
<td>Fair (x 2)</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>Terrible (x 1)</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Average rating</td>
<td>3.6</td>
<td>3.5</td>
</tr>
</tbody>
</table>

It appears that repeated attendance does not diminish members' enthusiasm for the activity. You could continue by checking for age differences by sorting the respondents into "intermediates" and "seniors" and see if one group rated the activity higher or lower than the other.

The possibilities for sub-sorting are usually voluminous, even for a small scale evaluation. You don't need to explore every option - you'll soon get a feel for your data. Put your highest priority on relationships that deal most directly with the purposes of your evaluation.
Another way to inspect your data is to combine or consolidate information from two or more items into one table. For example, participants in a 4-H Clothing Resource Leader Workshop were asked in a follow-up survey to indicate ways in which they had shared workshop information. They were also asked to estimate the number of people they had reached. The table below efficiently organizes, summarizes, and communicates the relatively large amount of data generated by both questions. (You can begin to see how data interpretation exercises are closely linked to evaluation reports.)

### SHARING ACTIVITIES OF WORKSHOP PARTICIPANTS

<table>
<thead>
<tr>
<th>Method of sharing</th>
<th>% of participants using method</th>
<th>Number of persons reached</th>
</tr>
</thead>
<tbody>
<tr>
<td>With other 4-H leaders:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On a one-to-one basis (conversations, buddy system, etc.)</td>
<td>76.7</td>
<td>289</td>
</tr>
<tr>
<td>During an advisory council meeting</td>
<td>26.7</td>
<td>152</td>
</tr>
<tr>
<td>During a county-wide training meeting</td>
<td>22.2</td>
<td>400</td>
</tr>
<tr>
<td>At a county contest (fashion revue, judging contest, presentations day)</td>
<td>20.0</td>
<td>176</td>
</tr>
<tr>
<td>Through an item in county newsletter</td>
<td>15.6</td>
<td>500</td>
</tr>
<tr>
<td>At a non-competitive participation day (Stitch and Knit Day etc.)</td>
<td>5.6</td>
<td>71</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>1705</strong></td>
<td></td>
</tr>
<tr>
<td>With 4-H members:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On an individual basis</td>
<td>68.9</td>
<td>256</td>
</tr>
<tr>
<td>At a project meeting</td>
<td>64.4</td>
<td>323</td>
</tr>
<tr>
<td>Other methods</td>
<td>6.7</td>
<td>133</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>712</strong></td>
<td></td>
</tr>
<tr>
<td>With other individuals and groups:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family, friends, neighbors</td>
<td>65.6</td>
<td>283</td>
</tr>
<tr>
<td>Study group members</td>
<td>17.8</td>
<td>257</td>
</tr>
<tr>
<td>Others</td>
<td>13.3</td>
<td>148</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>688</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Grand Total:</strong></td>
<td><strong>3105</strong></td>
<td></td>
</tr>
</tbody>
</table>

*The sum of percentages exceeds 100 since participants could list more than one item.*
MAKING JUDGMENTS

Once you've systematically examined your data, once you know what the data mean, you are ready to make judgments. The evidence is based on objective analysis and observations, your judgment reflects a subjective interpretation of those observations.

Judgments involve values. In your data interpretation you'll be dealing with at least two types of value judgments - those based on evidence (your data) and those based on logic (sound and reasonable inferences drawn from the data).

Following is some advice to consider in making judgments to help describe and explain your findings.

1. **Use qualitative comments, but judiciously.** Sometimes people have been so conditioned to think of evaluation as "objective" that they're reluctant to venture even the most timid observations. It's perfectly permissible (in fact, even encouraged) for the evaluator to contribute his or her own interpretation. Extravagant claims or unfounded enthusiasm have no place in evaluation, of course, but some subtle descriptive comment along the way can help your audience work its way through your analysis. "Subtle" means descriptions that are not earth-shaking, provocative, or disputable. Some examples of such phrasing are:

   - a substantial majority
   - fairly substantial
   - a major influence
   - only a few
   - considerable differences
   - perhaps more importantly,
   - strong support for the idea that
   - very little support for
   - a strong association with
   - related strongly to

   Again, be sure your claim can be supported by the data (a "substantial" majority of 55% might be arguable; a "substantial" majority of 85% would seem reasonable). It's probably a good idea to avoid words or phrases such as "significant", "causes", or "correlates with" since they have statistical connotations beyond the scope of the simple descriptive statistics outlined earlier. (Such wording is all right, of course, if you're using statistical techniques where it is appropriate.) Instead, use words like "strong", "substantial", "associated with", or "relates to".

2. **Identify supposition and speculation.** Remember that interpretation involves explaining as well as describing. You might note something interesting or unexpected in your data, yet explainable. Offer your explanation, but in terms that let your audience know you are speculating or supposing. For example:

   More experienced leaders spent more time on leadership roles than less experienced leaders, possibly because they may have taken on additional responsibilities. (Words in italics for example only.)
Other examples of phrasing are:

Possibly influencing these figures is _______________.
One explanation might be _______________; another possibility
is _______________.
We could speculate that _______________; however, it can
also be argued that _______________.
A likely influence is _______________.
We suspect that _______________.

3

Give a complete and accurate assessment. You can give an interpretation of
the data even when you report them factually. For example, consider the re-
sponses to the following item:

The Community Pride program is an excellent way of teaching youth
the basics of citizenship.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>40%</td>
</tr>
<tr>
<td>Somewhat agree</td>
<td>25%</td>
</tr>
<tr>
<td>Uncertain</td>
<td>25%</td>
</tr>
<tr>
<td>Somewhat disagree</td>
<td>5%</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>5%</td>
</tr>
</tbody>
</table>

It would be accurate to report that 65% of the respondents agreed with the state-
ment. However, if that's the only observation noted, it can be inferred that 35%
disagreed. In fact, only 10% disagreed, while 25% were uncertain. It's not ne-
cessary to report every detail, but be sure what you report is not misleading.

4

Reinforce your findings if possible. Often it's possible to reinforce or sub-
stantiate your findings with data from other sources. Perhaps other people have
reported similar observations which strengthen your case. Or, subjective data
may exist which can be incorporated into your interpretation. For example, the
evaluation report for a 4-H Clothing Resource Leader Workshop included this para-
graph following a discussion of the survey findings:

We've also had supplemental feedback throughout the year from a var-
iety of sources. Agent narrative reports have expanded on county
sharing efforts and an occasional letter or visit from a workshop
participant offers continuing testimonials. 4-H clothing judges at
the State Fair remarked that the quality of exhibits had increased
dramatically from the previous year. These comments were reinforced
in at least one agent report: "County 4-H clothing judges reported
that the quality of construction was superior to that observed in
other years. Visits with key leaders and some 4-H'ers attributed re-
sults to training and/or assistance offered by resource leaders after
regional clothing training last year."
Show evidence of reliability and validity. The difficulty of establishing reliability and validity for surveys was discussed earlier (pg.26). If you have evidence that your evaluation dealt effectively with sampling techniques, question writing, response rates, etc., be sure and include it. Here's an example from a 4-H leader survey:

We were pleased to find that the 335 responding project leaders appeared to be representative of all project leaders in the state in terms of two important characteristics - project area and county of residence. When we compared the respondents to the total population of project leaders, we found only minor variations. Fewer than two percentage points separated the two groups when distributions by project and by county were compared. Apparently our attempts to stratify the sample were successful.

Generalize cautiously. Avoid making inferences or drawing conclusions for a larger or different population than the one your respondents represent. If you collected data from a sample of 4-H horse project leaders, and your respondents appear to be representative of that group, you can generalize your findings to the total population of 4-H horse project leaders from which the sample was drawn. But you cannot generalize your findings to all 4-H project leaders. Similarly, if you collect data from all 4-H members in your county, you cannot generalize your findings to all youth in the county.

Face up to negative findings. Sometimes your findings may show that a program has had no impact or even negative effects. Recheck your data and ask: Is there any reason to believe that some key questions were misunderstood? Does the sample appear to be representative? Did you get a high rate of response to the questionnaire? Are there noticeable differences between responses recorded by different interviewers? Were computations done correctly?

In any case, don't try and sweep the whole thing under the rug and hope no one remembers you had an evaluation project underway. Not only is that cowardly and disreputable, but it's not likely to work. If you've involved others in the planning, even to a minor degree, they'll be around to ask about the outcome. You can lose credibility by claiming the whole thing was a bad dream.

Instead, report your findings, observations, and evaluation experiences as objectively as possible, including any subjective analysis of what might have affected the results. The most important thing in your report might be what you intend to do about the results: Modify or drop the program? Refine your evaluation techniques? How? Funding decision makers and other target audiences for accountability reports are interested in how programming decisions are made. Part of being accountable is to show that your organization is responsive to feedback, negative or positive.
Summarize the highlights. Even a very small survey can generate a lot of data, especially when items are sub-sorted in the analysis. You will likely not have the time or space to share all your findings with a single audience. It's important that you be able to capture the highlights in summary form for your target audience. Other findings can be used, as appropriate, with other audiences or in other situations. (More about this in the next chapter.)

Include conclusions, implications and/or recommendations. These terms are often used interchangeably, but there are subtle distinctions. Conclusions are broadly drawn, reasoned observations that sum up the analyses, interpretations, and judgments, and make an overall statement about the program you evaluated, the evaluation itself, the usefulness of the findings, and so on. Here is an example:

Considering both the objective and subjective data, we concluded that the workshop was successful in providing an update on textiles and clothing subject matter and the 4-H Clothing project. We were not totally satisfied, however, with the sharing of information which occurred. While some participants made real efforts in this respect, others appeared to attend only for their own personal benefit. More work seems needed to help agents understand more fully the resource leader concept and recruit (and support) participants who have a commitment to share information with audiences back home. We remain convinced that resource leaders can make a valuable contribution to county leader training and support efforts.

Implications and recommendations tie together the findings and conclusions, relating them directly back to program decisions. They might suggest that a program be continued, modified, or terminated, or identify needs for related programs, additional evaluation, or a reallocation of resources.

Conclusions, implications, and recommendations should be clearly, logically, and obviously drawn from your findings and interpretations. Your audience should not be treated to a surprise at the end. Think of yourself as an investigative journalist, not a suspense novelist.

Involvle others. It's often helpful to ask co-workers or others familiar with your program to review your findings and resulting interpretations, conclusions, etc. Ask if they can find holes in your logic or if they see additional interpretations you might have missed.
REPORTING THE RESULTS

The payoff of an accountability evaluation effort comes when the results are reported. Again, keep your audience in mind. People have different abilities and experiences that influence the way they receive and use evaluation reports. How to best share your findings, conclusions, and recommendations will require insight into your audience's interests, responsibilities, and ability to apply information to decision making.

Keeping in mind the people in your target audience, ask yourself:

- What do they need to know to make decisions?
- What do they like to hear?
- How do they judge success?
- What are their expectations? (of the program, of the evaluation, of you?)
- How much do they already know?
- How do they like to get information?
- How do they use information?

Also consider timing, from three standpoints: When will your audience find your report timely and useful? How much time are they likely to spend reading or listening to your report? How much time do you have to prepare your report?

With careful planning, you can shape your report to increase understanding of Extension, answer questions that have been asked, suggest solutions to problems, support a position, or influence people to take a certain action.

SELECTING A METHOD

It is not necessary to prepare a complete written report of your evaluation, unless that suits the needs of your target audience. (Some evaluators, however, find that preparing such a report, even if it's never distributed, helps clarify their thinking and serves as a "storehouse" of data which can be readily drawn upon in the future.) Other ways of communicating evaluation results include these:

- A series of written reports addressing different findings
- A written summary report
- Oral reports, with or without handouts and visual aids
- Hearings (the evaluator is questioned by decision makers in a formal setting and may be asked to give a presentation)
- Radio, television, newspapers, newsletters (the evaluator may be interviewed, provide copy for a story, feature, column, or fillers, or prepare information for his or her own show)
- Slides, videotapes, photographs (usually with narration or commentary)
You will likely find a combination of these approaches to be useful - both for your target audience and for additional audiences with whom you'd like to share your findings. For each audience, review the foregoing questions to identify the most effective means of communication.

GETTING GOOD MILEAGE

Perhaps one of the biggest shortcomings in evaluation efforts is failing to get the most possible mileage from the results. After you go to all the trouble of collecting, analyzing, and interpreting your data, you miss out on most of the payoff if you don't follow up by sharing the results with as many people as you can. Occasionally this sharing might involve a complete report, but usually it can be accomplished through a summary report or even more informal means, such as a letter, memo, phone call, or personal conversation.

Are there parts of your evaluation - maybe even the results of a single item - that could be shared with any of the following audiences?

- The respondents who participated in your study. Did you promise them a copy of your report? Are they part of a support group who would be interested in the outcome?

- Special interest or cooperator groups, current or potential donors. Example: The state beef council would likely be interested in the finding that as many as 85% (or as few as 25%) of the 4-H members participating in a foods judging contest were able to correctly identify 10 cuts of meat. (Such information would provide feedback to the council if it had provided resources to help support this learning or serve as a discussion point in soliciting new resources for program improvement.)

- Community agencies. Example from a Michigan evaluation of an urban gardening program: 46.5% of the families involved with the program did not have any employed adults in the home and 25% of the families involved had a handicapped person living in the home. 47% of these families indicated that the handicapped person worked in the garden. (Sharing this type of information can help make contacts, strengthen relationships, gain program support, and establish Extension as an organization that cooperates with others.)

- Voters, citizens, taxpayers.

  - Are there parts of your evaluation that might be of general interest to the public? Example from Wisconsin: 95% of the county's 4-H clubs carried out at least one community-focused activity during the past year. Activities included cleaning up town roads, maintaining waysides, sponsoring a rabies clinic, maintaining a county building. . .

  - Are there results which show taxpayers their investments have some payoff? Example from Michigan: An urban gardening program showed it saved the community more than $119,000.

  - Are there findings that reinforce the land-grant concept? Example from Oregon: Last year 4-H volunteers trained by the OSU Extension staff donated a total of 28,000 hours to work with Benton County youth.
- **Media representatives.** Are there findings with local news or feature value? Giving evaluation information a timely "news peg" can increase its appeal for media use. Are there findings that provide feedback relating to local media? Example: 75% of the youth interviewed named KLVR as "the station most listened to."

- **Current program participants.** Examples: Parents' involvement might be stimulated by sharing evaluation results showing what their children are learning in 4-H. Bite-sized pieces of evaluation information, served as fillers in leader newsletters, can provide feedback, keep leaders informed about Extension, and expand their awareness of other program areas.

- **Potential program participants.** Are there results that can be incorporated into recruitment efforts? Examples:

  - (In a news story announcing a 4-H Babysitting Workshop) Participants in last year's workshop report earnings averaging $50 per month. Parents gave 95% of the sitters an "excellent" rating when asked to describe the care given their children.

  - (In a leader recruitment campaign) Leaders now in the program describe their experiences as "very rewarding" (86%), "a worthwhile learning opportunity" (90%), and "a significant contribution to the community" (96%).

- **Subject matter specialists.** Example: An Oregon evaluation of time spent by volunteer leaders turned up the finding that 95% of the 4-H Clothing project leaders rated member project material as "very helpful." This information was shared with the textiles and clothing specialist who had recently written and introduced new project materials. Materials with low ratings were also brought to the attention of specialists to provide support for the possible revision of materials.

- **Your Extension colleagues.** Perhaps your evaluation has merit for publication in a professional journal or newsletter or for presentation at a professional meeting. Or, a more informal behind-the-scenes report chronicling your experiences and lessons learned might be very helpful if circulated to others who may be struggling with evaluation projects.

- **Your supervisor.** Your supervisor should be made aware of your evaluation from the very beginning, of course. After all, one of the reasons you're probably doing an evaluation in the first place is because he or she expects it. Share the results of your evaluation, as well as your plans for communicating them. Supervisors not only like to be informed in case someone mentions your evaluation in conversation, but quite often they can suggest or arrange ways of sharing the findings or combining them with other information to strengthen messages relating to Extension support.
Another way of getting mileage from your evaluation is to follow the advice of another well-known youth organization: Be prepared! Carry a copy or two of your evaluation summary in your pocket or briefcase.

This is not as silly as it may sound. Numerous opportunities for sharing come up in unexpected conversations or "teachable moments". When that happens, or when someone asks you "what's new?", you'll be ready.

An example of some ways that findings from one evaluation were distributed is shown on the following page. The evaluation focuses on contributions that adult volunteer leaders make to the Oregon 4-H program in terms of the time and money spent in support of their leadership activities. The major target audience for accountability purposes was the tax-paying public. (The accountability message is expressed at the bottom of the table.) (14)

A copy of the questionnaire used to collect the data is in the appendix, along with examples of the news stories used to report findings and the "idea sheet" suggesting ways that data might be used.

It's no accident that a lot of the information in this section sounds like "good PR". Jackson (8) uses an interpretation of PR that ties together evaluation, accountability, and reporting:

\[ PR = \text{Performance} + \text{Recognition} \]

If your organization performs well, but isn't recognized for its performance, it will lose support. If your organization receives recognition, but doesn't continue to perform well, it will also lose support.
### DISTRIBUTION OF RESULTS

Adult Volunteer Leader Contributions to the Oregon 4-H Program

<table>
<thead>
<tr>
<th>Audience</th>
<th>Emphasis</th>
<th>Follow-up information and materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative staff (Dean of Agriculture, Director of Extension, program leaders, area supervisors, others)</td>
<td>Accountability</td>
<td>Complete written report, with summary and highlights section at front. Sent with cover letter.</td>
</tr>
<tr>
<td>State legislative committee</td>
<td>Accountability</td>
<td>Director of Extension presented summary of findings and conclusions in testimony.</td>
</tr>
<tr>
<td>State 4-H staff</td>
<td>Program planning, Accountability</td>
<td>Complete written report, with summary and highlights section at front. Sent with cover letter. Oral summary and discussion at staff seminar. Further discussion of data having implications for specific projects, leader training etc.</td>
</tr>
<tr>
<td>Executive Director, Oregon 4-H Club Foundation</td>
<td>Program planning, Accountability, Use with potential &amp; current donors/ supporters</td>
<td>Complete written report, with summary and highlights section at front. Sent with cover letter indicating additional copies of report or summary section available to send to board members, donors, others. Item prepared for Foundation newsletter.</td>
</tr>
<tr>
<td>Extension subject matter specialists with 4-H responsibilities</td>
<td>Accountability, Program planning</td>
<td>Copy of summary and highlights section, with cover letter indicating a copy of the complete report would be sent if requested.</td>
</tr>
<tr>
<td>County Extension staff</td>
<td>Local accountability, Leader recognition, Leader recruitment</td>
<td>Copy of summary and highlights section, with cover letter indicating a copy of the complete report would be sent if requested. A “work sheet” with instructions so each county could generalize study findings to formulate an individualized profile in terms of volunteer time spent etc. An information sheet with ideas on how to use the findings from the statewide survey and county profile (media, newsletters, leader recognition efforts, recruiting efforts, reports to local funding agencies). (Example in appendix)</td>
</tr>
<tr>
<td>State 4-H Advisory Council</td>
<td>Accountability, Program planning, Informational purposes</td>
<td>Copy of summary and highlights section, with cover letter indicating a copy of the complete report would be sent if requested. Oral report and discussion at semi-annual meeting.</td>
</tr>
<tr>
<td>Colleagues in other 49 states</td>
<td>Information and follow-up report</td>
<td>Complete written report, with summary and highlights section at front. Sent with cover letter.</td>
</tr>
</tbody>
</table>

*a Where accountability was concerned, the rationale and general message was:

When you invest in Oregon 4-H you help support a program not only staffed by a professional educator in every county, but further strengthened by the efforts of more than 6,000 unpaid adult volunteers who give their personal time and money to extend the program to more than 50,000 youth throughout the state.

Extension professional staff provides training and support for these volunteers and are instrumental in organizing the educational aspects of the program. The volunteers are the key to program delivery as they transmit ideas and information and share their skills in direct contact with youth.
PREPARING A REPORT

Evaluation reports must be designed to generate action rather than to uphold research tradition. Since a lot of the people you'll want to reach are very busy, it's important to keep any report - written or oral - brief and to the point. Putting major findings in the beginning of the report may capture the attention of those who won't take the time to read every page or listen to every word. And using a popular writing or speaking style, rather than scholarly discourse, will improve understanding and increase appeal.

Again, consider your audience. For lay audiences, keep your report concise, non-technical, and easy to understand. Include only major findings and explain how they relate to the particular needs or interests of the audience. Make your presentation personal, appealing, and focused.

Follow the same advice if you're reporting to professional colleagues in Extension or related fields, but include more detail if they're likely to be interested. Add information about methodology (data collection, analysis, sampling), as well as implications, conclusions, and recommendations clearly drawn from the data.

General advice for popular writing applies to nearly every audience and to both oral and written reporting:

- Focus on your most important information.
- Make clear the purpose of your evaluation.
- Confine your comments to the main facts and keep them flowing in a logical order.
- Use the simplest words, illustrations, or examples that will serve your purposes.
- Provide enough information, and the right kind of information, to make your report believable and convincing.
- Use the present tense and active verbs.
- Tell the Extension story whenever possible by reminding your audience of its mission (education) and its scope (agriculture, home economics, 4-H - youth, community development, energy, forestry, marine).

In addition to text or narration, consider other ways of presenting data, such as graphs, maps, sketches, and diagrams. These can be used to convey important messages as well as add interest to your presentation. Check out different styles of tables and graphs by looking at examples in popular publications, particularly news magazines. They show some surprisingly attractive and effective techniques for communicating data, some of which can be readily adapted to a variety of situations.
Basic formats for graphs are shown below. In general, bar graphs (vertical or horizontal) are easier to understand than line graphs or surface charts. Grouped bars are easier to understand than segmented bars. Bar graphs and pie charts are about equally suitable for showing divisions of 100%, but bar graphs are generally easier to design. (13)

For special reports, you might want to work with an editorial staff (such as the agricultural communications unit affiliated with your land grant university). Editors can be extremely helpful in improving readability, choosing visuals, and planning an effective presentation.
**Written Reports**

Most of your written reports are likely to be done in short summary form. Currently enjoying popularity is the "executive summary", usually one to three pages in length. (Several examples of short summary reports are included in the appendix.)

Following is a typical outline for a short written report:

- **Summary and highlights:** what was evaluated and why; major findings, conclusions, and recommendations.

- **Background information about the program:** origin of the program, objectives or purpose of the program; number and characteristics of the participants; description of program activities; staffing for the program.

- **Description of the evaluation:** purpose (the evaluation question), design, what was measured and how, data collection and analysis procedures. (Remember, don't be more technical than your audience will understand.)

- **Results:** what did you find out?

- **Discussion of results:** your judgment and interpretation.

- **Conclusions and recommendations.**

An alternate form is: **Overview, Methods, Results, Discussion, and Implications.**

A more complete report (usually of considerable length) might also include any or all of the following: acknowledgments, table of contents, introduction, references, and appendix.

Your job isn't finished until your reports are distributed. Will they be mailed out? (You may need a cover letter.) Will they be hand delivered? (Make an appointment if you want to accompany the delivery with personal comment or discussion.) Will they be used as handouts? (During a meeting, in a booth or display, in conversations.) Posted on community bulletin boards? Displayed in publications racks or on counters in offices and businesses? Inserted in newspapers or newsletters? All of the above?

Be sure that any report includes the date and your name, title, organization (Extension and university, address, and telephone number. Be willing to take credit and responsibility for the work you did!)
Oral Presentations

For oral presentations, pick out a few key ideas and save the rest of the information for background material in handouts (keep them short). It's easy for people to get overloaded with data and end up understanding and retaining very little.

If you have a lot of information, and the group is willing, it might be better to break it up into several presentations over several meetings. (Arrange this beforehand, of course, to prepare your audience, as well as strategize your presentation.)

If others were involved in planning or conducting the evaluation, consider involving them in the reporting. In some cases this can help legitimize the evaluation, as well as add interest to the presentation.

State at the beginning of your report why you are giving it, how it's organized, and what you want people to do with it. Unless you are known to everyone in the group, or have been fully introduced, be sure to identify yourself by name, position, and organization (include both Extension and the university).

Make your presentation visual as well as verbal. Your audience will understand and remember more if what they hear is reinforced by what they see. Visuals have other advantages, too. They can:

- Force you to organize and summarize your information in simple ways.
- Serve as notes, reminding you of your next point and easing any presentation jitters you may have.
- Add interest to your presentation.
- Focus the audience's attention on a particular point.
- Give the audience the impression that you are well prepared and well organized.

Putting together visuals for most presentations doesn't have to be a big production involving a lot of time, skill, and expense. Clear handwriting in multicolored pens can be very effective. For more formal or special occasions, use slicker productions.

Consider the size of your audience. Will they be able to see a flipchart or would an overhead transparency be better? (Don't be caught saying "I know you probably can't see this, but it says . . ."). How many copies of handouts will be needed? Will you plan to take questions during the presentation (usually done with small groups) or at the end (traditional with large groups)?

On rare occasions you may find yourself in a situation where you are faced with an aggressive or hostile questioner. Don't be drawn into a confrontation. Stay
cool, breathe deeply, and respond calmly. (Appreciate the fact that not all people think alike and try to reflect benevolent thoughts about the wonder of individual differences.) This won't make it go away, but will help you keep on a rational track and perhaps de-fuse the situation.

_Never_ apologize for your data. If someone challenges your findings or methodology, some appropriate responses might be:

- "Actually, that's what we, too, thought we might find, but the data show otherwise. We suspect it's because _____________."

- "Perhaps that might be true of another group of people, but the people we asked, who were (youth, volunteers, homemakers etc.) said _____________."

- "We believe our methodology is sound and our computations are correct. Therefore we feel our findings accurately reflect the feelings of (group of people) about (topic)."

- "That's a good question for someone to explore." or "Perhaps we might take a look at that in the future."

- "That was not an issue we addressed. Our purpose was _________."

- "To disprove our findings, someone would have to show that ____ is true. Until that happens, our data are the best (or the only) available on the subject."

- "In this type of evaluation research, surveys very rarely undergo rigid tests of reliability and validity. Instead, reliability and validity are built in by designing questions with particular care and attention, pilot testing the questionnaire, selecting a representative sample, getting a high rate of response, and using an appropriate means of data analysis."

Further reinforce if you know of other evidence to support your findings or if you have an explanation of why people might have responded in a particular way. It perhaps goes without saying, but don't use any of the above statements if they're not mostly true.

Anticipate questions and challenges before your presentation and mentally rehearse possible responses. (In some ways this is like preparing for a thesis defense.)

Unless you're dealing with the big leagues (such as a formal legislative hearing, where "interference" is practically a given), you're not likely to encounter such challenges for several reasons: your findings will only reflect part of a much bigger picture; they are not likely to be controversial; and, particularly if you've been sharing your progress with your audience, there will probably be no big surprises.
WRAPPING IT UP

A few important things remain to be done after you've prepared your report and given it to your target (and other) audiences. For the most part, these are simple "housekeeping tasks":

- **Destroy the list of names matching respondent numbers on questionnaires or interview schedules.** This action will help keep your promise of confidentiality. It will also protect you on those exceedingly rare occasions where you might be asked (or even court-ordered) to provide the list for someone else's purposes.

- **Identify any findings from your evaluation that relate to program improvement and feed them back into the program planning process.** (You may already have done this as part of your reporting.) These findings might be details directly applying to program organization, content, promotion, facilities, or teaching methods. Or, they might be of a broader nature, helping identify new programs, establish program direction and priorities, or determine allocation of resources.

- **Acknowledge the assistance of those who helped support your evaluation.** You will know best how to do this - whether by formal correspondence or announcement, an informal thank you note, a letter to a supporter's supervisor, a phone call, a conversation, an appropriate gift or momento, a favor in return, a promise of assistance in a future venture, or combinations of the above.

- **Take time to reflect on your evaluation experiences.** There's little if any "down time" in Extension to thoroughly digest one's efforts - several programs are always running simultaneously - some just starting, others well under way, and still others only in the planning stages. In addition are the staff meetings, committee meetings, and reports essential to the maintenance of the organization. Amidst all this activity, take a few minutes to consider what you've learned about evaluation, what you wish you'd known at critical points, and how you might do things differently next time. And, give yourself permission to feel some pride in your accomplishment!

- **Think about plans for your next evaluation effort.** Evaluation, like most parts of the program planning process, is ongoing. And it's something you learn only by doing. In doing even one evaluation, you'll accumulate skills that will make your next evaluation project easier. Of course there is the phenomenon that accompanies most learning - the more you learn, the more you realize there is to learn. This handbook is only an introduction, but if you expand on the alternatives offered and continue to build your skills, you'll be armed with experiences that will enable you to tackle practically any evaluation task that is likely to be given to you.
Two other tasks may not be so easy to accomplish:

- Disengage yourself from the evaluation.
- Keep things in perspective.

Evaluation, like virtue, sometimes seems to go unrewarded, at least extrinsically. While you are feeling the "rush" or "high" that often accompanies a notable achievement (or signals survival of a potential disaster), everyone else may seem underwhelmed by your accomplishment.

Perhaps your report was received less than enthusiastically by your target audience. Maybe your supervisor responded with a generic letter of acknowledgment (or didn't respond at all). Even your colleagues might not have greeted your findings with the acclaim you secretly feel is merited.

Worst of all, it may seem like no one is making use of the findings you worked so hard to get.

If so, cheer up! There are several good reasons why you may be feeling this way.

First of all, you've been very involved in your evaluation. It's probably dominated your thoughts more than you'd care for anybody to know. Now that it's over, it's time to disengage, to let go and move on to something else. Bringing closure is difficult, however, when you don't have feedback indicating that your evaluation was time well spent.

Next, remember that evaluation is nothing special - it's expected. It's part of the educational program planning process; it's part of your job. Even though your evaluation report may have been a big deal to you (and rightfully so), your audience is likely inundated with similar types of information from multiple sources.

Remember, too, that results from evaluation are rarely surprising. Your audiences have not been holding their collective breath waiting for a single set of findings.

Your report is, after all, one more piece of information. This does not diminish its importance, however. Even though it may not be apparent to you, your evaluation is serving a useful purpose.

The "usefulness" of evaluation data has long been the subject of considerable debate. Since the definition of evaluation states that data are used to make judgements about program effectiveness, evaluators expect that those judgements will lead to direct and immediate use in program decisions. When no direct action occurs, they feel that their evaluation efforts have been in vain.

It's not necessarily so, says Patton (11). He found that 78 percent of the decision makers he surveyed felt that specific evaluation findings had had an impact on program. After further questioning, he concluded that evaluation data are used, but not in ways that evaluators anticipated.
The users did not define impacts that led immediately and directly to the making of major, specific program decisions. Instead, the impact tended to be more subtle and diffuse. Evaluation findings provided additional pieces of information in the difficult puzzle of program decisions, permitting some reduction in the uncertainty within which such decision makers inevitably operate. Users saw information as:

- Resolving doubts, confusions, and misunderstandings.
- Building awareness.
- Filling in gaps.
- Supporting facts already known.
- Confirming impressions.
- Broadening understanding about the total program.
- Giving additional credibility to the program.

It seems that evaluation impacts in ripples, not in waves. Occasionally a major evaluation emerges with great impact, but most make no more than a small and momentary splash in the great pond of decision making.

In some ways, results of program evaluation can be considered as pieces of a mosaic reflecting the total picture of one's knowledge of an overall program or of a total organization such as Extension. Each person sees a different picture or pattern depending on his or her perspective. For example...

Local evaluations are perceived as big pieces in a mosaic viewed by local decision makers.

From a state perspective, local evaluations may be seen as rather small pieces relatively indistinguishable from dozens of other small pieces dominated by large blobs representing "major impact studies".

Those same impact studies become small fragments in a national mosaic, while local studies become mere flecks.

Also reflected in these mosaics are pieces representing observations, prejudices, and misunderstandings, with the size of each piece determined by the viewer's personal knowledge and experience.

Each fleck, each piece makes an important contribution in helping define the total picture of Extension. The objective is to squeeze out the misunderstandings and prejudices and replace them with usable information which clarifies the picture and expands understanding.
THE MAMMOTH PICTURE.
CLOSING COMMENTS

It would be naive to assume that well-done program evaluations will invariably lead to increased program support. Such thinking would ignore the potential influence of three interrelating factors:

- **Varying perceptions.** What you consider convincing evidence of program success may be seen by others as relatively inconsequential or contrary to their personal values or vested interests. Some people may not even agree that you should have offered the program in the first place. For example, people who do not believe that tax money should be used to support a youth program "predominately for the middle class" are not likely to be swayed by lists of 4-H program accomplishments. Likewise, environmentalists will not be thrilled by a well-done documentation of how crop production is increased by the aerial spraying of chemicals to control pests.

- **Political considerations.** As Patton (11) points out, evaluation findings are usually viewed within a political context. Situations in the political process which may influence how your evaluation findings are used include rivalries within or between agencies, departments, and organizations; budget battles; power struggles; internal debates; and external pressures.

- **Continuing competition for public (and private) funds.** Current analysts of the social scene do not foresee a return to an age of affluence (16). Not only will the pieces of the tax dollar pie be sliced thinner, but the pie itself will be smaller. With fewer public funds available, competition will increase for money from the private sector as agencies and organizations look for additional sources of income.

Given these formidable factors, one might ask: Why bother? The answer is three-fold. First, it is the responsibility of educators to provide feedback regarding the results of their programs for accountability purposes, as well as for program improvement. Such evaluation is part of the job, part of what distinguishes educational programs from sporadically organized activities.

Secondly, people making up "the public" or participating as decision-makers in roles as advisory council members, legislators, or voters, are going to evaluate your program regardless of whether you do or not. If you provide data from well-done evaluation, you not only show evidence that you are a professional educator, but you help shape people's opinions about Extension by supplementing their data from other information sources.

Lastly, while the three factors may seem formidable, they are not insurmountable...

The major key to success is knowing and understanding the target audience for your evaluation. It should be obvious that you cannot please every individual, every group, so it's particularly important that you select a specific audience,
one to which you are accountable, and focus on its needs and interests. By learning about that audience and becoming familiar with its organizational structure, its people, and the way it works, you can become aware of at least some of the political considerations that may affect how your evaluation will be received. Sometimes these considerations can be avoided; sometimes you can make them work for you.

To the extent that it's possible, involve your audience in helping shape your evaluation - the number of people to include in the sample, the questions to be asked, the methodology, the analysis.

Another key to success is the reporting strategy. It's essential that any decision-making information you communicate be perceived as convincing, credible, useful, and timely. It's also important that such information be presented in a variety of packages targeted to specific audiences in palatable and appealing ways. Even though funds become scarcer, organizations which are prepared with evidence of program success are likely to emerge with stronger funding than those which have not shown (or reported) results of program evaluation.

For both of these keys, Extension's rich tradition of people-involvement and reputation for providing sound information are invaluable assets and should be taken advantage of.

A third element in successful evaluation is confidence - in your organization, in your program, and in your abilities as an educator and evaluator.

And finally, it's important that evaluation efforts be kept in perspective. The degree to which Extension (or any other organization) flounders or flourishes in the future will ultimately depend on the strength of its programs, not just the substance of its evaluations. Evaluation is only part of the process involved in presenting Extension as a purposeful, well-organized and managed system, staffed by responsive and responsible educators who produce results.

**POSTSCRIPT**

It's been my intent to provide information and advice that will help you gain confidence in your role as program evaluator. Like your evaluation skills, this handbook is in the developmental stages. If you have ideas, comments, or suggestions for improvement, let me know so they can be considered for any future revisions. There is no need to systematically evaluate your reactions - a simple letter or post card will do!

-bjs-
REFERENCES


APPENDIX

4-H Alumni Survey (Idaho) .............................................. 93
4-H Livestock Program Survey - The RAP Approach (New York) .......... 99
4-H'ers Learn and Help Communities (Wisconsin) .......................... 109
Growing Roots Urban Gardening Program (Michigan) ...................... 111
What 4-H Members Learn in Animal Science Projects (Oregon) ........... 113
Impacts of Weight Control Series (Michigan) ................................ 115
Volunteer Leader Survey (Oregon) ......................................... 117
Questionnaire by Corinne Rowe, 4-H program coordinator, University of Idaho. The format follows recommendations outlined by Don A. Dillman in his Mail and Telephone Surveys: The Total Design Method. (The cover below is actual size. Copy on the following pages has been reduced.)

4-H in Idaho

A survey of the ideas and experiences of former 4-H program participants and club members
4-H PARTICIPATION/MEMBERSHIP

Q-1 There are several ways young people can participate in 4-H. To begin with, we would like to know the extent of your participation. (Please circle the number for all that apply.)

1. MEMBER OF A 4-H CLUB WITH PROJECTS AND ACTIVITIES
2. INDIVIDUAL STUDENT USING 4-H PROJECT MATERIAL
3. PARTICIPATED THROUGH A SCHOOL CLASS DOING 4-H PROJECTS
4. WATCHED THE 4-H TV SERIES, MULLIGAN STEW
5. ATTENDED SHORT-TERM CLASS OFFERED BY COUNTY EXTENSION OFFICE
6. ATTENDED 4-H OVERNIGHT CAMP
7. ATTENDED 4-H DAY CAMP
8. DON'T REMEMBER PARTICIPATING IN 4-H

Q-2 What grade were you in when you first joined or participated in 4-H? (Give school grade.)

Q-3 How many years did you participate in 4-H? (Indicate number of years.)

Q-4 People join 4-H for different reasons. As best you can remember, please indicate how important each of the following was as a reason why you joined 4-H. (Please circle your answer)

<table>
<thead>
<tr>
<th>Reason for joining 4-H</th>
<th>VERY IMPORTANT</th>
<th>IMPORTANT</th>
<th>NOT IMPORTANT</th>
<th>NOT APPLICABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Brother or sister was involved</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT</td>
<td>NA</td>
</tr>
<tr>
<td>2. Friends were in or joining</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT</td>
<td>NA</td>
</tr>
<tr>
<td>3. Parents wanted me to join</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT</td>
<td>NA</td>
</tr>
<tr>
<td>4. Sounded like fun</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT</td>
<td>NA</td>
</tr>
<tr>
<td>5. Mother or dad were leaders</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT</td>
<td>NA</td>
</tr>
<tr>
<td>6. Parents were in 4-H at one time</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT</td>
<td>NA</td>
</tr>
<tr>
<td>7. Wanted to be part of a club or group</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT</td>
<td>NA</td>
</tr>
<tr>
<td>8. Wanted to see other part of the county fair</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT</td>
<td>NA</td>
</tr>
<tr>
<td>9. Wanted to attend 4-H camp</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT</td>
<td>NA</td>
</tr>
<tr>
<td>10. Did nothing else to do</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT</td>
<td>NA</td>
</tr>
<tr>
<td>11. Had no choice—was required in school</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT</td>
<td>NA</td>
</tr>
<tr>
<td>12. Other (specify)</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT</td>
<td>NA</td>
</tr>
</tbody>
</table>

Q-5 Of all these reasons, which were probably the most important? (Place the number of the reason in the appropriate box.)

Q-6 How did you first learn about participating in the 4-H program? (Circle the number of all that apply.)

1. THROUGH FAMILY MEMBERS
2. THROUGH FRIENDS
3. THROUGH INFORMATION HANDED OUT AT SCHOOL
4. MOTHER OR FATHER CALLED THE EXTENSION OFFICE
5. TEACHER AT SCHOOL INVOLVED THE ENTIRE CLASS
6. SAW A DISPLAY AT THE COUNTY FAIR
7. OTHER (Specify)

Q-7 If your 4-H experience was through your school only, why did you not join an out-of-school 4-H club? (Circle the number of your answer.)

1. NO CLUB IN MY AREA
2. DID NOT KNOW HOW TO JOIN
3. WAS NOT INTERESTED IN DOING THE KINDS OF THINGS 4-H DOES
4. MY PARENTS DID NOT WANT ME TO JOIN A 4-H CLUB
5. FRIENDS WERE NOT IN 4-H CLUB
6. WAS INVOLVED IN OTHER ACTIVITIES AT SCHOOL
7. DIDN'T HAVE TIME
8. QUESTION DOES NOT APPLY (For 4-H club members)
9. OTHER (Specify)

Q-8 What youth programs were available in your community? Which did you belong to? (Please indicate those programs available and those you belonged to.)

<table>
<thead>
<tr>
<th>Available in Community</th>
<th>Those You Belonged To</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Scouts</td>
<td>AVAILABLE</td>
</tr>
<tr>
<td>2. Camp Fire</td>
<td>AVAILABLE</td>
</tr>
<tr>
<td>3. YMCA/WC</td>
<td>AVAILABLE</td>
</tr>
<tr>
<td>4. Parks and recreation athletic teams</td>
<td>AVAILABLE</td>
</tr>
<tr>
<td>5. Boys/girls club</td>
<td>AVAILABLE</td>
</tr>
<tr>
<td>6. Church youth group</td>
<td>AVAILABLE</td>
</tr>
<tr>
<td>7. School athletic team</td>
<td>AVAILABLE</td>
</tr>
<tr>
<td>8. FHA</td>
<td>AVAILABLE</td>
</tr>
<tr>
<td>9. FFA</td>
<td>AVAILABLE</td>
</tr>
<tr>
<td>10. Masonic groups</td>
<td>AVAILABLE</td>
</tr>
<tr>
<td>11. Other (Specify)</td>
<td>AVAILABLE</td>
</tr>
</tbody>
</table>

Q-9 Young people sometimes consider it more an honor or prestige to belong to one organization than another. Thinking of all the youth organizations in your community, in which of the following groups do you think the youth of this community would put 4-H? (Circle the number of your answer.)

1. TOP GROUP
2. NEXT TO THE TOP
3. MIDDLE
4. NEXT TO THE BOTTOM
5. BOTTOM GROUP
4-H PROJECTS

Q-10 Which of the following categories of projects did you take during your time in 4-H? (Indicate by circling YES those projects you remember taking in 4-H.)

1. Flying or rocketry
2. Dairy heifer/cow
3. Dairy goat
4. Dog
5. Horse
6. Beef/sheep-swine
7. Pork Pet
8. Poultry
9. Rabbit
10. Veterinary science
11. Art
12. Nonwoven
13. Photography
14. Leather crafts
15. Environmental conservation
16. Entomology (insects)

Q-11 Of all 4-H projects you took, which would you say were of greatest importance to you? (Place the number of the project from Q-10 in the appropriate box.)

☐ MOST IMPORTANT ☐ SECOND MOST IMPORTANT

Q-12 In general, to what extent did you refer to each of the following sources of information for help on your project work?

- Written project manuals
- Written project record books
- Adult 4-H leader
- Club teen leader
- Family members
- Friends in the club
- County extension staff
- Books or magazines
- Club project meetings
- Other (specify)

Extent Used as Source of Information for Help (Please circle your answer)

A GREAT DEAL SOME NOT MUCH NONE AT ALL

Q-13 Were you able, through your 4-H project work, to sell a project or a service to earn some money? (For example—livestock animal, garden crops, babysitting)

☐ NO ☐ YES

If yes, about how much did you earn each year? (Give the year, indicate what was sold and the approximate amount earned.)

Project or Item Sold Dollars Earned
1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10. 

Q-14 In addition to the projects you carried, which of the following activities did you participate in? (Indicate by circling YES those activities you remember participating in.)

1. Club officer or committee member
2. Giving demonstrations
3. Community pride or service project
4. County fair
5. County demonstration contest/style show
6. County demonstration contest/style show/judging contest/othershow
7. District demonstration contest/style show/judging contest/othershow
8. State demonstration contest/style show
9. District fair
10. Other (specify)

Q-15 Of all these activities, which would you say were the most meaningful to you? (Place the number of the activity from Q-15 in the appropriate box.)

☐ MOST MEANINGFUL ☐ SECOND MOST MEANINGFUL

Q-16 How important do you feel such activities are as a part of the 4-H program? (Please circle your answer.)

1. VERY IMPORTANT
2. SOMEWHAT IMPORTANT
3. NOT VERY IMPORTANT
4. NOT AT ALL IMPORTANT

Q-17 As a 4-H member, how aware were you of district, state, and national 4-H activities (events) and opportunities?

1. FULLY INFORMED
2. ADEQUATELY INFORMED
3. VAGUALLY INFORMED
4. KNEW NOTHING OF THESE

Q-18 What suggestions do you have for improving any or all of the various 4-H activities named above?
Q-10 Reflecting back on your experiences in 4-H, how much enjoyment and satisfaction did you gain from each of the following?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Great</th>
<th>Some</th>
<th>Little</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The projects you worked on</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. The people you were with</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. The excitement of the county fair</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4. The activities you participated in</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. The competition of the fair</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. The challenge of bettering each year's record</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. The club meetings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. The teen club</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. The awards and prizes received</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Other (specify)</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Q-20 Of all of these, which did you enjoy the most and which the least? (Place the number of the responses from Q-20 in the appropriate boxes.)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Most Enjoyed</th>
<th>Least Enjoyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The projects you worked on</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. The people you were with</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. The excitement of the county fair</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. The activities you participated in</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. The competition of the fair</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. The challenge of bettering each year's record</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. The club meetings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. The teen club</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. The awards and prizes received</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Other (specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q-21 Within your 4-H club, describe the extent to which you...

<table>
<thead>
<tr>
<th>Activity</th>
<th>Great</th>
<th>Some</th>
<th>Little</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Were given challenging tasks</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2. Were included in making important decisions</td>
<td></td>
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<tr>
<td>3. Were involved in planning what the club would do</td>
<td></td>
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<tr>
<td>4. Were given important responsibilities</td>
<td></td>
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<tr>
<td>5. Old things yourself instead of watching others</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6. Had freedom to develop and use your own skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>7. Got help when you needed it</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>8. Discussed your progress with your club leader</td>
<td></td>
<td></td>
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<tr>
<td>9. Felt you made a contribution</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>10. Were given opportunity to learn and practice leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Received encouragement and help from home</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q-22 In your opinion are project manuals...

<table>
<thead>
<tr>
<th>Activity</th>
<th>Always</th>
<th>Usually</th>
<th>Seldom</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Written at the right reading level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Interesting</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3. Factually informative</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4. About the right length</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Useful and necessary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q-23 To what extent do you feel your participation in 4-H contributed to your personal development in each of the following areas?

<table>
<thead>
<tr>
<th>Area</th>
<th>Great</th>
<th>Some</th>
<th>Little</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Develop personal pride in achievements and progress</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. Develop personal skills in planning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Develop personal skills in leadership</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>4. Develop personal skills in communication</td>
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<tr>
<td>5. Develop personal skills in decision making</td>
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<tr>
<td>6. Develop personal skills in problem solving</td>
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<td></td>
<td></td>
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<tr>
<td>7. Develop personal skills in decision making</td>
<td></td>
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<td></td>
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<tr>
<td>8. Develop personal skills in decision making</td>
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<td></td>
<td></td>
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<tr>
<td>9. Develop personal skills in decision making</td>
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<tr>
<td>10. Develop personal skills in decision making</td>
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<tr>
<td>11. Develop personal skills in decision making</td>
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<tr>
<td>12. Develop personal skills in decision making</td>
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<tr>
<td>13. Develop personal skills in decision making</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Develop personal skills in decision making</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Q-24 Of all the skills learned through 4-H, which have you been able to use in your daily life?

<table>
<thead>
<tr>
<th>Skill</th>
<th>Great</th>
<th>Some</th>
<th>Little</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Develop personal skills in planning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Develop personal skills in leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Develop personal skills in communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Develop personal skills in decision making</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Develop personal skills in decision making</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q-25 What, if any, influence did your participation in 4-H have on...

<table>
<thead>
<tr>
<th>Influence</th>
<th>Great</th>
<th>Some</th>
<th>Little</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Continuing your education beyond high school</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Your choice of job/career</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Your choice of college to attend</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Your preparation for assuming adult responsibilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Your preparation for assuming adult responsibilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q-26: Were you a 4-H club mentor as a teenager? (That is, beyond the eighth grade?)
1. No (Skip to Q-28)
2. Yes

a) If yes, how important would you say each of the following were for your continuing in 4-H?

(Please circle answer)

<table>
<thead>
<tr>
<th>Important...</th>
<th>VERY</th>
<th>SOME</th>
<th>NOT VERY</th>
<th>AT ALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Gain new knowledge and skills through project work</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT VERY</td>
<td>AT ALL</td>
</tr>
<tr>
<td>2 Belong to county 4-H teen club</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT VERY</td>
<td>AT ALL</td>
</tr>
<tr>
<td>3 Please my parents</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT VERY</td>
<td>AT ALL</td>
</tr>
<tr>
<td>4 Serve as a teen leader</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT VERY</td>
<td>AT ALL</td>
</tr>
<tr>
<td>5 Serve as a camp counselor</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT VERY</td>
<td>AT ALL</td>
</tr>
<tr>
<td>6 Participate in the county fair</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT VERY</td>
<td>AT ALL</td>
</tr>
<tr>
<td>7 Earn money through sale of livestock at fair</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT VERY</td>
<td>AT ALL</td>
</tr>
<tr>
<td>8 Attend 4-H Congress at the University of Idaho</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT VERY</td>
<td>AT ALL</td>
</tr>
<tr>
<td>9 Win a trip to Chicago</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT VERY</td>
<td>AT ALL</td>
</tr>
<tr>
<td>10 Be with my friends</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT VERY</td>
<td>AT ALL</td>
</tr>
</tbody>
</table>

b) Which of these was the most important reason you continued in 4-H as a teen?

[ ] MOST IMPORTANT REASON

Q-27: Did you serve as a teen leader in your club?
1. No
2. Yes

If yes, how would you rate this experience as preparation for leadership in working with others?

1 OUTSTANDING EXPERIENCE
2 SATISFACTORY
3 FAIR
4 POOR

Q-28: How important would you say each of the following was in your decision not to continue in 4-H?

(Please circle your answer)

<table>
<thead>
<tr>
<th>Important...</th>
<th>VERY</th>
<th>SOME</th>
<th>NOT VERY</th>
<th>AT ALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Group/club disbanded or school year ended</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT VERY</td>
<td>AT ALL</td>
</tr>
<tr>
<td>2 Meetings were boring</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT VERY</td>
<td>AT ALL</td>
</tr>
<tr>
<td>3 Leader quit</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT VERY</td>
<td>AT ALL</td>
</tr>
<tr>
<td>4 Leader didn't know how to lead a club</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT VERY</td>
<td>AT ALL</td>
</tr>
<tr>
<td>5 Friends quit</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT VERY</td>
<td>AT ALL</td>
</tr>
<tr>
<td>6 Other school activities interfered</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT VERY</td>
<td>AT ALL</td>
</tr>
<tr>
<td>7 Employment interfered</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT VERY</td>
<td>AT ALL</td>
</tr>
<tr>
<td>8 Projects were no longer interesting or challenging</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT VERY</td>
<td>AT ALL</td>
</tr>
<tr>
<td>9 Dislike 4-H</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT VERY</td>
<td>AT ALL</td>
</tr>
<tr>
<td>10 Funded moved</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT VERY</td>
<td>AT ALL</td>
</tr>
<tr>
<td>11 No longer eligible (over 19 years old)</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT VERY</td>
<td>AT ALL</td>
</tr>
<tr>
<td>12 Other (specify)</td>
<td>VERY</td>
<td>SOME</td>
<td>NOT VERY</td>
<td>AT ALL</td>
</tr>
</tbody>
</table>

THE 4-H PROGRAM OVERALL

Q-29: How would you like to know your opinion on some aspects of and concepts related to the overall 4-H program. Please indicate the extent to which you agree or disagree with each of the following:

(Please circle your answer)

<table>
<thead>
<tr>
<th>Q-29 Statement</th>
<th>STRONGLY AGREE</th>
<th>AGREE</th>
<th>DISAGREE</th>
<th>STRONGLY DISAGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Participation in 4-H helps young people develop confidence and a feeling of self worth</td>
<td>SA</td>
<td>A</td>
<td>O</td>
<td>50</td>
</tr>
<tr>
<td>2 The 4-H program places too much emphasis on competition and awards. Those who aren't competitive drop out.</td>
<td>SA</td>
<td>A</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>3 4-H is okay for young people of grade school age. It has little to offer youth of junior high and high school.</td>
<td>SA</td>
<td>A</td>
<td>O</td>
<td>50</td>
</tr>
<tr>
<td>4 Keeping records and filling out 4-H record books is an important learning experience</td>
<td>SA</td>
<td>A</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>5 Parents should be encouraged to participate in local 4-H club work</td>
<td>SA</td>
<td>A</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>6 4-H work could be continued without donors. Awards and prizes mean little to 4-H members</td>
<td>SA</td>
<td>A</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>7 With so many camping opportunities available elsewhere, there is no need for a 4-H camping program</td>
<td>SA</td>
<td>A</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>8 For the most part leaders of 4-H clubs seem to know a lot about the projects/subjects they teach</td>
<td>SA</td>
<td>A</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>9 The most important part of 4-H is the county fair</td>
<td>SA</td>
<td>A</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>10 4-H keeps young people busy and out of trouble to a greater extent than most other youth programs</td>
<td>SA</td>
<td>A</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>11 Over emphasis on awards and winning in 4-H results in cheating by some 4-H members</td>
<td>SA</td>
<td>A</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>12 Parents and leaders benefit as much as members do in learning from 4-H projects</td>
<td>SA</td>
<td>A</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>13 The conditions and rules for participating in 4-H are too rigid. They need to be more flexible</td>
<td>SA</td>
<td>A</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>14 The wide variety of 4-H opportunities (activities, events, awards, trips) beyond the club and county is a positive factor for continuing in 4-H</td>
<td>SA</td>
<td>A</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>15 The awards program in 4-H provides a positive incentive which keeps members in 4-H</td>
<td>SA</td>
<td>A</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>16 The amount of money paid at the county fair for 4-H livestock is unrealistic and teaches youth false values</td>
<td>SA</td>
<td>A</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>17 Project manuals are rarely read by young 4-H members. A leader's guide is probably all that is needed for beginning projects</td>
<td>SA</td>
<td>A</td>
<td>0</td>
<td>50</td>
</tr>
</tbody>
</table>
**BACKGROUND INFORMATION**

Finally, some information about you is needed to help with the analysis of this study.

**Q-30** Which of the following best describes where you have lived most of your life? (Circle number.)

1. ON A FARM OR RANCH
2. IN THE OPEN COUNTRY, BUT NOT ON A FARM OR RANCH
3. IN A VILLAGE (UNDER 2,500 PEOPLE)
4. IN A TOWN (2,500-10,000 PEOPLE)
5. IN A CITY (OVER 10,000 PEOPLE)
6. IN A METROPOLITAN AREA (CITY OVER 50,000 PLUS NEARBY SUBURBS)

**Q-31** In what year were you born?

**Q-32** What is your sex?

1. MALE
2. FEMALE

**Q-33** During most of your growing up years, who did you live with?

1. BOTH PARENTS
2. MOTHER ONLY
3. MOTHER AND STEPFATHER
4. FATHER ONLY
5. FATHER AND STEPMOTHER
6. OTHER (Please explain)

**Q-34** What is your ethnic background?

1. WHITE
2. NATIVE AMERICAN (INDIAN)
3. HISPANIC
4. BLACK
5. ORIENTAL

**Q-35** How many brothers and sisters do you have?

**Q-36** How many are older than you?

**Q-37** During the time you were growing up, what was your...

a) Father's principal occupation
   
   TITLE ________________________________
   
   KIND OF WORK __________________________
   
   TYPE OF COMPANY/BUSINESS

b) Mother's principal occupation
   
   TITLE ________________________________
   
   KIND OF WORK __________________________
   
   TYPE OF COMPANY/BUSINESS

**Q-38** What was your father's highest level of education?

HIGHEST GRADE __________________________________________ COMPLETED

**Q-39** What was your mother's highest level of education?

HIGHEST GRADE __________________________________________ COMPLETED

**Q-40** What is the highest grade you have completed?

HIGHEST GRADE __________________________________________ COMPLETED

**Q-41** What did you do the year after completing or leaving high school?

1. I WAS EMPLOYED IN:
   
   KIND OF WORK __________________________
   
   TYPE OF BUSINESS _______________________

2. ATTENDED COLLEGE/VOCATIONAL SCHOOL
   
   NAME __________________________
   
   LOCATION __________________________
   
   MAJOR __________________________
   
   CAREER DESIRED ______________________

3. OTHER (Specify) ______________________

**Q-42** Overall, how would you describe your high school academic achievement?

1. ALL A'S (or equivalent)
2. MOSTLY A'S
3. MIX OF A'S AND B's
4. MOSTLY B's
5. MIX OF B's AND C's
6. MOSTLY C's
7. MIX OF C's AND D's
8. MOSTLY D's

**Q-43** To what extent have other family members participated in programs or used the services of the county extension office?

(Please circle your answer)

1. Attended educational programs sponsored by Cooperative Extension
   
   SEVERAL TIMES NEVER
   
   ONCE OR TWICE NEVER
   
   ONCE OR TWICE A MONTH NEVER
2. Consulted agricultural agent for help with farm/ranch related concerns
   
   SEVERAL TIMES NEVER
   
   ONCE OR TWICE NEVER
   
   ONCE OR TWICE A MONTH NEVER
3. Consulted home economist for help with consumer/home related matters
   
   SEVERAL TIMES NEVER
   
   ONCE OR TWICE NEVER
   
   ONCE OR TWICE A MONTH NEVER
4. Member of an agricultural commodity group
   
   MORE THAN 10 YEARS NEVER
   
   5 TO 10 YEARS NEVER
   
   2 TO 5 YEARS NEVER
   
   LESS THAN 2 YEARS NEVER
5. Member of an Extension Homemaker's Club
   
   MORE THAN 10 YEARS NEVER
   
   5 TO 10 YEARS NEVER
   
   2 TO 5 YEARS NEVER
   
   LESS THAN 2 YEARS NEVER
6. Leader of a 4-H club
   
   MORE THAN 10 YEARS NEVER
   
   5 TO 10 YEARS NEVER
   
   2 TO 5 YEARS NEVER
   
   LESS THAN 2 YEARS NEVER
7. Member of county extension advisory committee
   
   MORE THAN 10 YEARS NEVER
   
   5 TO 10 YEARS NEVER
   
   2 TO 5 YEARS NEVER
   
   LESS THAN 2 YEARS NEVER
8. Member of county 4-H Leader's Council
   
   MORE THAN 10 YEARS NEVER
   
   5 TO 10 YEARS NEVER
   
   2 TO 5 YEARS NEVER
   
   LESS THAN 2 YEARS NEVER
9. Assist with county fair
   
   MORE THAN 10 YEARS NEVER
   
   5 TO 10 YEARS NEVER
   
   2 TO 5 YEARS NEVER
   
   LESS THAN 2 YEARS NEVER

**Q-44** What is your current occupation?

1. FULL TIME STUDENT (during school year)
2. FULL TIME EMPLOYED
3. If full time student, please indicate:
   
   NAME OF COLLEGE __________________________
   
   LOCATION __________________________
   
   MAJOR __________________________
   
   CAREER DESIRED ______________________

**Q-45** Would you be interested in serving as a volunteer in the 4-H program? (Please circle number.)

1. NO
2. YES

If yes, in what way?

1. 4-H CLUB LEADER OR ASSISTANT LEADER
2. SHORT TERM SPECIAL INTEREST INSTRUCTOR
3. CAMP DIRECTOR
4. COORDINATOR OF COUNTY ACTIVITY(IES)
5. COUNTY FAIR JUDGE (4-H Projects)
6. DEMONSTRATION CONTEST JUDGE
7. MEMBER OF ADVISORY COMMITTEE
8. OTHER (Specify)

**Q-46** Will you encourage your own children to join 4-H?

1. NO
2. YES
IMPLICATIONS FOR PROGRAM IMPROVEMENT

- The 4-H livestock program development committee can improve the program through a detailed analysis of the survey responses to the question, "what suggestions do you have for improving the program?"

- County planning groups can use the data provided by this study to determine program priority areas. While 97% reported the program to be helpful, it would seem that more than 52% should be reporting that the program was "of much help."

- The data suggest that increased emphasis on subject matter in the area of marketing would help youth acquire additional knowledge, skills and abilities. While 97% reported that the livestock sale met their expectations, only 54% reported their participation to be helpful. 25% reported both helpful and harmful aspects and 10% said it was too early to tell.

- Youth reported a high degree of knowledge, skill and interest developed in the areas of animal selection, evaluation, feeding, care and management, but fewer reported being determined to use the ideas and skills or having actually used them.

- The livestock committee identified "relating to others" and "accepting responsibilities" as important ingredients in the 4-H livestock program yet the percentage of youth reporting increased learning or acquisition of skills in these areas is relatively low. Consideration might be given to increased teen leadership opportunities in the livestock program.

---

 Wayne Fisher
 County Coordinator
 Wyoming County Cooperative Extension

 Bill Umscheid
 Program Coordinator
 Cornell University
 Ithaca, New York 14853

 Appreciation is expressed to the Wyoming County 4-H Program Development Committee, staff, 4-H teens, Cornell faculty and others who helped in the planning of the survey and made the telephone contacts to gather data for the study.

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Author's note:

A copy of the survey questions follows:

Copies of the RAP (Reflective Appraisal of Program) package can be ordered from Media Services, 8-10 Rensalaer Hall, Cornell University, Ithaca, New York 14853. Copies of the 14 survey questions, 4.25 each (minimum order, $10). Cost is $2.50 (out-of-state residents) or $2.00 (in-state residents). Order of $10 minimum is $3.50. Cost is $2.50 (out-of-state residents) or $2.00 (in-state residents). Order of $10 minimum is $3.50. Cost is $2.50 (out-of-state residents) or $2.00 (in-state residents). Order of $10 minimum is $3.50.

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From New York
A 10% random sample telephone survey of 29 Wyoming County Cooperative Extension 4-H Livestock Program participants was conducted by members of the Livestock Program Development Committees, county 4-H staff and Cornell University faculty in the spring of 1981.

Survey respondents included 4-H members, volunteer leaders, parents, program committee members and private sponsors. 29 interviews of a potential 296 total program participants were conducted using a REAP (Reflective Evidence to Appraise Programs) instrument.

The subject matter content of the program includes animal nutrition, animal health, livestock marketing and management of beef, sheep and swine. Participants also have an opportunity to gain abilities and skills in relating to other people and accepting responsibility. Educational events and activities included in the program and number of survey respondents participating are:

- Quiz Bowl, Demonstrations and Judging 10
- Livestock Shows 23
- Livestock Sale 23

55% of the survey respondents were 4-H members age 12-19. 24% were adults between the ages of 20-39. 17% were adults between 40-60.

Survey respondents were active in the following roles:

- 4-H Member 55%
- Volunteer Leader 14%
- Parents 28%
- Member of Program Committee 10%
- Private Sponsor 27%

*The figures total over 100% since some respondents serve in several roles.

The livestock bowl, demonstration and judging program met the expectations of 80% of the respondents. The livestock show rated 90% and the livestock sale 97%.

52% of the respondents said participation in the program was of much help and 45% reported some help.

Respondents reported their participation to be helpful according to the following percentages:

Animal Selection & Evaluation 84%
Feeding, Care & Management 86%
Money Mgmt. & Mktg. Livestock 54%
Relating to Other People 64%
Accepting Responsibility 82%

Respondents are from:

- Farms 48%
- Towns 14%
- Rural Non-Farm 38%

The program met the expectations extremely or fairly well for 96% of the respondents. The program did not meet the expectations for 4% of the respondents.

95% of the respondents indicated the results of their participation have been of much or of some help. 5% indicated the program was of little help.

The table below summarizes responses to survey questions in percentages.

<table>
<thead>
<tr>
<th>Did the Programs Meet Your Expectations?</th>
<th>Learned more about</th>
<th>Developed more interest</th>
<th>Acquired new skills</th>
<th>Determined to use ideas</th>
<th>Used ideas and skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Selection &amp; Evaluation</td>
<td>90</td>
<td>96</td>
<td>94</td>
<td>79</td>
<td>84</td>
</tr>
<tr>
<td>Feeding, Care &amp; Management</td>
<td>97</td>
<td>86</td>
<td>85</td>
<td>78</td>
<td>86</td>
</tr>
<tr>
<td>Managing Money &amp; Mktg. Livestock</td>
<td>80</td>
<td>77</td>
<td>73</td>
<td>64</td>
<td>57</td>
</tr>
<tr>
<td>Relating to Others</td>
<td>85</td>
<td>83</td>
<td>70</td>
<td>70</td>
<td>72</td>
</tr>
<tr>
<td>Accepting Responsibility</td>
<td>83</td>
<td>79</td>
<td>83</td>
<td>84</td>
<td>86</td>
</tr>
</tbody>
</table>
Ilyoming County 4-H Livestock Program Evaluation
(Reflective Evidence to Appraise Program)

Telephone Survey

Interviewer's Name ______________________ Telephone __________
Respondent's Name ______________________ Telephone __________

Introduction by Interviewer

Description of Program to be Evaluated

The Ilyoming County 4-H Meat Animal Program conducted by Cooperative Extension included educational content and a variety of events and activities designed to contribute to the growth and development of youth. In addition to showing and selling their animals, the members participated in county-wide activities such as livestock judging, public presentations, livestock bowl contests, fitting and showing clinics, and special sessions on management. Members also participated in their neighborhood 4-H clubs which have programs on livestock subject matter and field trips. The County Fair at Pike and the State Fair in Syracuse also offer experience for meat animal project members.

In 1980, 131 4-H members were enrolled in the program. 103 of these participated in the meat animal show and sale. 50 of the entries were in the swine division, 23 in beef, 29 in lamb and 1 in goat.

1. Is this account of the Ilyoming County 4-H livestock program activities:
   - 23 accurate as far as I know.
   - 7 reasonably accurate.
   - 3 not accurate.
   - 3 don't know.

2. Of all the activities listed in this program, in which were you involved personally? How much?
   - Bowl, demonstrations, judging
     - 3 much
     - 9 some
     - 3 little
     - 7 none
   - Livestock Show(s)
     - 14 much
     - 10 some
     - 2 little
     - 2 none
   - Livestock Sale
     - 16 much
     - 16 some
     - 1 little
     - 1 none

3. At the time you were involved in the livestock bowl, demonstration or judging, would you say they did or did not meet your expectations?
   - 3 yes, met them extremely well.
   - 13 yes, met them fairly well.
   - 1 no, did not meet them well.
   - 1 no, did not meet them at all well.
   - 3 don't recall/don't know.

4. At the time you were involved in the livestock show, would you say it did or did not meet your expectations?
   - 11 yes, met them extremely well.
   - 16 yes, met them fairly well.
   - 1 no, did not meet them well.
   - 1 no, did not meet them at all well.
   - 3 don't recall/don't know.

5. At the time you were involved in the livestock sale, would you say it did or did not meet your expectations?
   - 16 yes, met them extremely well.
   - 14 yes, met them fairly well.
   - 1 no, did not meet them well.
   - 1 no, did not meet them at all well.
   - 3 don't recall/don't know.

   1 other response (see attached sheet for comments)
6. Considering all the activities in which you were involved, would you say you did or did not learn more about:

A. Animal selection and evaluation?
   - 12 yes, learned much more.
   - 18 yes, learned somewhat more.
   - 1 no, learned nothing applicable to me.
   - 2 no, learned nothing at all.
   - 1 don't recall/don't know.
   - 1 other response (see attached sheet for comments)

B. Feeding, care and management?
   - 9 yes, learned much more.
   - 22 yes, learned somewhat more.
   - 1 no, learned nothing applicable to me.
   - 1 no, learned nothing at all.
   - 1 don't recall/don't know.
   - 1 other response (see attached sheet for comments)

C. Managing money and marketing livestock?
   - 7 yes, learned much more.
   - 19 yes, learned somewhat more.
   - 2 no, learned nothing applicable to me.
   - 1 no, learned nothing at all.
   - 1 don't recall/don't know.
   - 1 other response (see attached sheet for comments)

D. Relating to other people?
   - 5 yes, learned much more.
   - 22 yes, learned somewhat more.
   - 1 no, learned nothing applicable to me.
   - 1 no, learned nothing at all.
   - 1 don't recall/don't know.
   - 1 other response (see attached sheet for comments)

E. Accepting responsibility?
   - 13 yes, learned much more.
   - 14 yes, learned somewhat more.
   - 3 no, learned nothing applicable to me.
   - 1 no, learned nothing at all.
   - 1 don't recall/don't know.
   - 1 other response (see attached sheet for comments)

7. After participating in the program, would you say you did or did not become more interested in:

A. Animal selection and evaluation?
   - 18 yes, much more interested.
   - 14 yes, somewhat more interested.
   - 1 no, no more interested.
   - 1 no, less interested.
   - 1 don't recall/don't know.
   - 1 other response (see attached sheet for comments)
B. Feeding, care and management?
   12 yes, learned much more.
   14 yes, learned somewhat more.
   5 no, learned nothing applicable to me.
   10 no, learned nothing at all.
   1 don't recall/don't know.
   1 other response (see attached sheet for comments)

C. Honey management and marketing?
   9 yes, much more interested.
   16 yes, somewhat more interested.
   1 no, no more interested.
   1 no, less interested.
   1 don't recall/don't know.
   1 other response (see attached sheet for comments)

D. Relating to other people?
   7 yes, learned much more.
   19 yes, learned somewhat more.
   1 no, learned nothing applicable to me.
   1 no, learned nothing at all.
   2 don't recall/don't know.
   1 other response (see attached sheet for comments)

E. Accepting responsibility?
   11 yes, learned much more.
   14 yes, learned somewhat more.
   5 no, learned nothing applicable to me.
   10 no, learned nothing at all.
   1 don't recall/don't know.
   1 other response (see attached sheet for comments)

B. Would you say you did or did not acquire skills in:

A. Animal selection and evaluation?
   10 yes, acquired much more skill.
   19 yes, acquired somewhat more skill.
   1 no, acquired no more skill.
   1 no, lost skill.
   1 don't recall/don't know.
   1 other response (see attached sheet for comments)

B. Feeding care and management?
   7 yes, acquired much more skill.
   19 yes, acquired somewhat more skill.
   1 no, acquired no more skill.
   1 no, lost skill.
   1 don't recall/don't know.
   1 other response (see attached sheet for comments)
C. Money management and livestock marketing?

<table>
<thead>
<tr>
<th></th>
<th>yes, acquired much more skill.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>yes, acquired somewhat more skill.</td>
</tr>
<tr>
<td>19</td>
<td>no, acquired no more skill.</td>
</tr>
<tr>
<td>5</td>
<td>no, lost skill.</td>
</tr>
<tr>
<td>1</td>
<td>don't recall/don't know.</td>
</tr>
<tr>
<td>2</td>
<td>other response (see attached sheet for comments)</td>
</tr>
</tbody>
</table>

D. Relating to other people?

<table>
<thead>
<tr>
<th></th>
<th>yes, acquired much more skill.</th>
</tr>
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<tbody>
<tr>
<td>3</td>
<td>yes, acquired somewhat more skill.</td>
</tr>
<tr>
<td>20</td>
<td>no, acquired no more skill.</td>
</tr>
<tr>
<td>5</td>
<td>no, lost skill.</td>
</tr>
<tr>
<td>2</td>
<td>don't recall/don't know.</td>
</tr>
<tr>
<td>1</td>
<td>other response (see attached sheet for comments)</td>
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E. Accepting responsibility?

<table>
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<tr>
<td>9</td>
<td>yes, acquired somewhat more skill.</td>
</tr>
<tr>
<td>17</td>
<td>no, acquired no more skill.</td>
</tr>
<tr>
<td>3</td>
<td>no, lost skill.</td>
</tr>
<tr>
<td>2</td>
<td>don't recall/don't know.</td>
</tr>
<tr>
<td>2</td>
<td>other response (see attached sheet for comments)</td>
</tr>
</tbody>
</table>

9. Would you say you did or did not become more determined to try out ideas on:

A. Animal selection and evaluation?

<table>
<thead>
<tr>
<th></th>
<th>yes, much more determined.</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>yes, somewhat more determined.</td>
</tr>
<tr>
<td>13</td>
<td>no, no more determined.</td>
</tr>
<tr>
<td>6</td>
<td>no, less determined.</td>
</tr>
<tr>
<td>1</td>
<td>don't recall/don't know.</td>
</tr>
<tr>
<td>1</td>
<td>other response (see attached sheet for comments)</td>
</tr>
</tbody>
</table>

B. Feeding, care and management?

<table>
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<tr>
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<th>yes, much more determined.</th>
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</thead>
<tbody>
<tr>
<td>10</td>
<td>yes, somewhat more determined.</td>
</tr>
<tr>
<td>15</td>
<td>no, no more determined.</td>
</tr>
<tr>
<td>5</td>
<td>no, less determined.</td>
</tr>
<tr>
<td>1</td>
<td>don't recall/don't know.</td>
</tr>
<tr>
<td>1</td>
<td>other response (see attached sheet for comments)</td>
</tr>
</tbody>
</table>

C. Money management and livestock marketing?

<table>
<thead>
<tr>
<th></th>
<th>yes, much more determined.</th>
</tr>
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<tbody>
<tr>
<td>4</td>
<td>yes, somewhat more determined.</td>
</tr>
<tr>
<td>17</td>
<td>no, no more determined.</td>
</tr>
<tr>
<td>8</td>
<td>no, less determined.</td>
</tr>
<tr>
<td>1</td>
<td>don't recall/don't know.</td>
</tr>
<tr>
<td>1</td>
<td>other response (see attached sheet for comments)</td>
</tr>
</tbody>
</table>
10. Would you say you have or have not put to use the ideas or skills you learned regarding:

A. Animal selection and evaluation?
   - 15 yes, have made much use of them.
   - 12 yes, have made some use of them.
   - 3 no, have only passed them on to others for their consideration.
   - 2 no, have not used them at all.
   - 1 don't recall/don't know.
   _1 other response _ (see attached sheet for comments)

B. Feeding, care and management?
   - 10 yes, have made much use of them.
   - 7 yes, have made some use of them.
   - 3 no, have only passed them on to others for their consideration.
   - 2 no, have not used them at all.
   - 1 don't recall/don't know.
   _1 other response _ (see attached sheet for comments)

C. Money management and livestock marketing?
   - 3 yes, have made much use of them.
   - 16 yes, have made some use of them.
   - 5 no, have only passed them on to others for their consideration.
   - 5 no, have not used them at all.
   - 1 don't recall/don't know.
   _2 other response _ (see attached sheet for comments)

D. Relating to other people?
   - 1 yes, have made much use of them.
   - 23 yes, have made some use of them.
   - 3 no, have only passed them on to others for their consideration.
   - 2 no, have not used them at all.
   - 2 don't recall/don't know.
   _1 other response _ (see attached sheet for comments)
E. Accepting responsibility?

10 yes, have made much use of them.

18 yes, have made some use of them.

no, have only passed them on to others for their consideration.

3 no, have not used them at all.

1 other response (see attached sheet for comments)


11. You indicated that you have made use of the ideas or skills presented in the program. Would you say the results have been helpful or harmful related to:

A. Animal selection and evaluation?

28 results have been helpful.

___ results have been harmful.

2 results have been both helpful and harmful.

1 it's too early to tell.

1 don't recall/don't know.

1 other response (see attached sheet for comments)


B. Feeding, care and management?

28 results have been helpful.

___ results have been harmful.

2 results have been both helpful and harmful.

1 it's too early to tell.

1 don't recall/don't know.

2 other response (see attached sheet for comments)


C. Honey management and livestock marketing?

28 results have been helpful.

___ results have been harmful.

2 results have been both helpful and harmful.

1 it's too early to tell.

2 don't recall/don't know.

2 other response (see attached sheet for comments)


D. Relating to other people?

21 results have been helpful.

___ results have been harmful.

4 results have been both helpful and harmful.

1 it's too early to tell.

1 don't recall/don't know.

1 other response (see attached sheet for comments)


E. Accepting responsibility?

26 results have been helpful.

___ results have been harmful.

3 results have been both helpful and harmful.

1 it's too early to tell.

3 don't recall/don't know.

2 other response (see attached sheet for comments)
12. How helpful have the results of participation in the livestock program been?
   
   10 of much help.
   14 of some help.
   1 other response (see attached sheet for comments)

13. Are there any other helpful or harmful results of a financial, personal or social nature related to:
   
   A. Animal selection and evaluation.
      (see attached sheet for comments)
   
   B. Feeding, care and management.
      (see attached sheet for comments)
   
   C. Honey management and marketing.
      (see attached sheet for comments)
   
   D. Relating to other people.
      (see attached sheet for comments)

14. Over the past year, how much advantage or disadvantage would you say there has been, in terms of dollar values, from using ideas or skills presented in the livestock program?
   (see attached sheet for comments)

5. What suggestions do you have for improving the program?
   (see attached sheet for comments)

1. What is your age category?
   2 12-19
   3 20-29
   3 30-39
   1 40-49
   3 50-59
   4 60 and over

Are you a:
   1 4-H member.
   4 volunteer leader.
   8 parent.
   3 member of a 4-H program committee.
   5 private sponsor.
   5 other (see attached sheet for comments)

Where do you live?
   1 city.
   1 suburb.
   4 town.
   13 rural non-farm.
   16 farm.
Most clubs, 72%, received information on community activities from 4-H literature, the 4-H agent, or the Extension office. Some, 16% received the new Youth in Action material.

These percentages came from a telephone survey of 105 4-H leaders. Twenty-one counties were drawn randomly—three from each Extension district. Then five clubs were drawn randomly in each of the 21 counties. Interviewers reached 98% of the leaders.

Clubs ranged from 4 to 206 members. The average club had 20 to 30 members. The 105 clubs included more than 3,200 members.

In most cases all or almost all of the members took part in the club's community activities. However, in 16% of the clubs fewer than half took part.

Most clubs included 9-11 year olds as well as older members.

95% of Wisconsin's 4-H clubs carried out some community focused activity during the past year.

Activities included such things as: cleaning up town roads, maintaining waysides, sponsoring a rabies clinic, maintaining a community building, providing recreation for the elderly, conducting a community auction.

The average club completed at least two community focused activities during 1976-1977.

Summary of a telephone survey by University of Wisconsin-Extension, Department of Youth Development and Program and Staff Development. August, 1977
The percentage of clubs carrying out various activities is as follows:

Cleaning up, protecting or conserving some environmental aspect of the community
- 73%

Helping the elderly, handicapped or other special group
- 69%

Improving community health or safety
- 50%

Preserving some part of the community like an old school house or town hall
- 49%

Collecting money or working for a special cause
- 42%

Studying how government works
- 26%

Almost half of the clubs worked with another organization or agency in the activity. Over a fourth talked with a local government official such as a town chairman or mayor.

The percentage of 4-H leaders who felt that community focused activities helped most of their members learn and develop certain attitudes or skills appears below.

Respecting other people's property
- 76%

Better able to work with other club members
- 70%

Better able to talk and work with adults
- 69%

More interest in community concerns
- 59%

Better able to organize and carry out tasks
- 46%

Better understanding of how government works
- 9%

Almost all of the leaders felt that it was important for 4-H clubs to carry out some community centered activities. Some comments were:

"It teaches them that the community is theirs and they should be responsible for it and the people in it."

"Makes kids more aware of what's happening in the community."

"Kids learn where to go for help."

"Kids are appreciated by other people."

"Kids learn that they can do something."
Abstract

The intensive evaluation of Growing Roots Detroit Urban Gardening Program shows the program has positive impacts for individuals, families and the community. Growing Roots utilized the expertise of the Michigan Cooperative Extension Service and 117 community volunteers to provide residents of inner-city Detroit with assistance in the areas of food production, utilization, preservation and nutrition.

The program’s ultimate goal is to develop expertise within this community that will exist after the Growing Roots program is over. Program participants received technical assistance in the following ways:

- workshops in specialized content areas, such as canning, mulching, nutrition and the maintenance of demonstration gardens in various parts of the community. This provided residents with a visual image of what a successful garden would be like in their community.

- staff assistance to individual community people.

A random survey of the community being served by this program found:

- more than 67% of the community residents, primarily older members of the community, had some previous gardening experience within their home.

- 95% of the residents felt that Detroit needed a program such as Growing Roots.

- 100% of the respondents gave either neutral or positive responses to the Michigan Cooperative Extension Service.

A survey of program participants indicated 46.5% of the families involved with the program did not have any employed adults in the home and that 25% of the families involved had a handicapped person living in the home. 47% of these families indicated that the handicapped person worked in the garden.

Growing Roots received support from a number of sources including $18,747 of in-kind services from the Michigan Cooperative Extension Service and $13,334 from volunteers. Other forms of support were received from the community. 18% of the program's participants were referred by the mayor’s Farm-a-Lot program.

*This is an abstract of a study entitled, "An Evaluation of the Detroit Urban Gardening Program" by Ralph Abbott, Extension Specialist, College of Urban Development, Michigan State University, East Lansing, Michigan.
Because of seed donations from a community source, the program was able to give seeds to 85% of its participants.

Additional findings showed that:

- the program served 3000 families from the target area.
- the average garden yielded more than 75 pounds of produce.
- program participants significantly increased their knowledge about proper nutrition.
- 94% of the participants plan to participate in the program next year.
- the program saved the community more than $119,000.
- the average family saved $39.90 in food costs as a result of being in this program.
- 40% of the program participants helped other people with their gardens.
- a direct relationship existed between participation in this program and the amount of positive individual, family and community outcomes received by participants.
- program participants told an average of five additional persons about the program.
- participation in the program had the following effects on participants and their families.
  - It put food on the table.
  - It gave them personal satisfaction.
  - It caused the family to spend more time together.
  - It was a learning experience.
  - It brought neighbors together.
- a significant percentage of the participants, both black and white, were elderly and elderly participants saw the program as a chance to share their knowledge with other members of the community.
- as a result of participants sharing food with other community members, it was possible that this program impacted on more than 48,000 individuals.

A major strength of this program was the way program administrators utilized evaluation results to make corrections while the program was still fluid. These midstream corrections contributed to the overall success of this program.

This program, like all new programs, had initial start-up problems; however these problems were corrected and the projections for next year's program are as follow:

- involve at least 15,000 families (with more than 60,000 individuals) in the program.
- impact on the lives of more than 240,000 residents of Detroit.
- save the average participating family more than $100 in food costs (because of improved efficiency).
What 4-H Members Learn in Animal Science Projects

From Oregon

The 5,000 Oregon 4-H members enrolled in beef, sheep, and swine projects might be expected to learn a lot about animal science - and they do. But as a recent survey shows, members are just as likely to learn a lot about "life skills" such as accepting responsibility and making decisions.

Members Report Substantial Learning

During the beginning years of 4-H animal projects focused primarily on food production. As 4-H grew and expanded, more emphasis was placed on helping youth develop life skills - those skills helpful to individuals throughout a lifetime, no matter where they live or what they do for a living. Members surveyed were asked how much they had learned - a lot, some, little or nothing - about five specific life skills. More than 40% of the members reported learning "a lot" about:

- Accepting responsibility: 74%
- Getting along with others: 66%
- Making decisions: 60%
- Communicating effectively: 42%
- Developing leadership: 40%

Members Gain Valuable Experience

4-H is experiential education - members "learn by doing." To determine the extent 4-H'ers had applied knowledge to practice, they were asked about their involvement in specific activities relating to life skills development. More than 50% of the members have:

- Assumed total responsibility for animal feeding/training: 75%
- Done community service: 62%
- Given a presentation: 61%
- Served as a club officer: 61%
- Served on committee: 54%

In addition, about 50% of eligible members (grades 7-12) have served as a junior leader, sharing responsibility of club leadership with an adult volunteer. More than 30% of the senior 4-H'ers (grades 10-12) have also served as a teen leader, assuming sole responsibility for leading a 4-H club under the guidance of an adult counselor.
Members Learn "Lots" In Animal Science

Raising animals successfully requires knowledge and skills in a variety of areas. Members were asked how much they had learned about animal care and feeding, management, health and nutrition, marketing, and competitive showing. At least 50 percent of the members reported learning "a lot" about:

- Training/grooming: 87%
- Showing sportsmanship: 79%
- Choosing equipment: 68%
- Planning feeding program: 55%
- Keeping cost records: 55%
- Telling if animal sick: 52%

Members Apply Knowledge To Practice

4-H members belong to clubs organized and led by adult volunteers trained by the OSU Extension Service. Members are actively involved in learning animal science as they raise their animals for market or breeding. To determine their experience levels in animal science, members were asked whether or not they had done certain activities. At least 50% of the members reported they had:

- Showed animals at fair: 93%
- Designed feeding program: 80%
- Cared for sick animal: 78%
- Calculated cost/pound: 78%
- Mixed feed rations: 68%
- Vaccinated an animal: 62%
- Raised an orphan animal: 61%
- Assisted at animal birth: 55%

Other Highlights

Members place as high value on learning life skills as they do on learning relating directly to animal science. When asked to name "the two most important things they had learned in 4-H," members gave life skill responses about as often as they gave animal science responses. Older members placed a higher value on life skill learning than did younger members, who were more interested in animals. Comments were often thoughtful and reflective.

Generally, members continue to learn as they progress through the project. Older members reported substantially more learning in most areas than did younger members. In some cases learning appeared to plateau for intermediate members (grades 7-9). Specific learning patterns will be analyzed with the 4-H Animal Science Development Committee, responsible for project review.

Survey Procedure

A stratified sampling design was used to insure representation by county, age, and project. Pre-tested questionnaires were sent to a sample of 1,117 members. 76% (845) were returned. Data were weighted to allow the findings to be projected statewide. Age groups were compared using analysis of variance. The study was conducted by Dr. Barbara J. Sawyer, Department of 4-H and Youth Development, Oregon State University, Corvallis, OR 97331.
LIGHTER AND LIVELIER: IMPACTS OF WEIGHT CONTROL SERIES

Anita Dean
Foods & Nutrition Specialist

A sample of participants in a weight control program report an average weight loss of 1/2 lb. per week and a commitment to practice good eating habits.

Overview: "Lighter and Livelier," a series of classes in weight control designed to teach participants how to modify their eating habits without a special diet, has been taught in 31 counties to over 1600 people in 1979-80. A shortened version of the series was taught during College Week to 120 people. Seventy-seven volunteers have been trained in 22 counties to assist in reteaching. In addition to series offerings, over 100 single classes were taught to more than 1500 participants bringing the total "Lighter and Livelier" contacts to over 3200 for the year.

In 1978-79, sixteen hours of in-service training on weight control, coordinated by Food and Nutrition Specialist Anita Dean, was completed by 48 Extension Home Economists. Topics discussed by experts in medicine and physiology, as well as nutrition included "Prevalence and Risks of Obesity," "Behavior Modification," and "Dietary Management." The goals of the training program were to enable participating Extension Home Economists to: 1) offer one or more series of classes on weight control on an annual basis using reliable references and format suggested during training; 2) provide those wanting to lose weight with reliable nutrition information and behavioral modification tools to achieve and maintain ideal weight; 3) train volunteers (preferably nurses and dieticians) to work with other organized weight control groups in the community.

Methods: "Lighter and Livelier" has an ongoing evaluation component built into the system. Pre and post tests are designed to determine participant characteristics, as well as to document behavioral and weight changes in individuals enrolled in the series. The evaluation procedure was computerized in 1979 and computer test forms were sent to all Extension Home Economists in the state.

Results: Based on a sample of 135 participants (mostly female) who completed pre and post tests in 1979-80, the average participants were 45 pounds overweight and had a weight problem for nearly 20 years; six in ten were very committed to trying to lose weight.

Although only about 28 percent of the sample reported reaching the goals they had set for themselves during the time period, almost all (99 percent) reported making changes in their eating and activity patterns. For the sample, the following changes were reported following participation:

- 71 percent are more committed to practicing good eating habits
- 58 percent choose fewer calorie foods and beverages
— 57 percent eat more fruits and vegetables

— 54 percent eat fewer snacks

— 47 percent have reduced fat intake

— 40 percent have adopted more desirable eating and activity patterns for their situations.

In terms of weight loss, the participants lost an average of six pounds per person in a 8-14 week time frame (810 pounds total).

Participants rated the Extension-sponsored program as better than other programs they have known with respect to providing usable suggestions (73 percent), having knowledgeable leaders (83 percent), and presenting credible information (69 percent). Fifty-three percent rated it as better than other programs in its ability to motivate participants to lose weight.

Discussion: Although the actual weight loss was less than participants had hoped, the goal was to move people into longer lasting less fluctuating patterns of weight control. Recognizing that weight control is a continuous problem for many people, 66 percent of the participants noted they would like the continuing support of a weight control group; 24 percent were willing to help start one in their communities and 15 percent had already joined or created one.

Dietary guidelines issued in 1980 by the U.S.D.A. have reinforced the need to achieve and maintain ideal weight with weight control and reduction in the incidence of obesity major objectives of dietary guidelines. Achievement, however, is difficult for a large number of people who resist changes in lifestyle. Nationwide attempts to prevent obesity in children and adolescents might provide a new approach to this difficult problem. Extension might emphasize a family-centered approach to obesity since family members often share this problem.
4-H volunteers make an important contribution

OSU study praises 4-H volunteers

How Important are volunteers to 4-H?

“Very important,” says Barbara Sawer, Oregon State University Extension 4-H and youth specialist, who is tabulating the results of a study of the contributions of time and other resources by volunteers to 4-H.

Sawer found in her study of 4-H project leaders and community coordinators that volunteers are giving five days of time for every one day of time devoted to 4-H by Extension professional staff members.

“National Volunteer Week (April 22-28) is an appropriate time for us to acknowledge the contributions of adult volunteers who work with the OSU Extension Service in making 4-H available to all Oregon youth in grades four through 12,” the specialist adds.

The work of volunteer 4-H leaders has been important to 4-H since its beginnings more than 60 years ago, Sawer points out. However, this is one of the first formal studies of their contributions to the program in Oregon.

She estimates that 4-H project leaders are giving nearly 320 “work years” to Oregon youth every year. The figure was arrived at by converting the time reported into 40-hour weeks, 52 weeks a year. There are about 4,800 4-H project leaders in the state.

Project leaders reported spending about 138 hours a year on 4-H business, while the community coordinator group spent over 85 hours. The time includes working with young people, meetings, and other 4-H activities.

In addition to their time, 4-H volunteer leaders also contribute other resources to the program in the form of refreshments, supplies, telephone calls and car mileage. Some of these expenses are tax deductible, she notes.

“It is clear,” the specialist emphasizes, “that the volunteers help Extension extend its resources to include more people than could ever be reached with professional staff, while increasing and broadening the impact of 4-H.”

Volunteer 4-H leaders have face-to-face contact with 4-H members and do nearly all of the direct teaching of youth in the program, she explains. The professional Extension staff works with the volunteers and is responsible for the program direction and activities.

On this page and the following three pages is information about Oregon’s study of the contributions of adult volunteer leaders.

The news story here appeared in papers throughout the state, netting close to 500 column inches of newspaper copy.

In addition, counties were given "work sheets" and instructions so they could document county figures based on the statewide findings. Numerous news stories also appeared featuring county news angles — see following page.
IDEA SHEET
Using the Findings from the Volunteer Leader Survey

Listed below are a few suggestions for using the data from the county work sheet. You will likely think of other ways to use the data; if so, let me know and we'll share it with others.

For ACCOUNTABILITY:

- Reports to county court or other funding groups to give evidence of local programming support from (unpaid) volunteer staff.
- Reports to donors and sponsors, as evidence of the local support (and local impact) of the 4-H program.

**General Accountability Message**

If you invest in _______ County 4-H, you help support a program not only staffed by _______ professional workers, but further strengthened by the efforts of more than _______ unpaid adult volunteers who give their personal time and money to extend the program to more than _______ youth in _______ County.

Extension professional staff provides training and support for these volunteers and are responsible for program direction and the educational aspects of programming. The volunteers are the key to program delivery as they transmit ideas and information and share their skills in direct contact with youth.

For AWARENESS AND RECRUITMENT:

- Use figures in leader recruitment efforts (media and other) to give idea of what volunteers do and scope of volunteer involvement.
- Use average figures for each leader role (horse project leaders, clothing project leaders, and so on—from column 3 of County Sheet) to help community coordinators answer a common question of potential leaders "About how much time would I spend as a 4-H _______ leader?"

For LEADER RECOGNITION efforts:

- Include figures in
  -- Talks at leaders' banquets
  -- Leader newsletters
  -- Foreword of Fair Premium Book as a "salute to leaders"
  -- Displays in county office, fair, or other location
  -- Releases to local news media (sample release attached)

OREGON STATE UNIVERSITY EXTENSION SERVICE

Suggested news story for release during (or before) National Volunteer Week, April 20-26, 1980. Insert the appropriate information into the blanks, using the County Work Sheet to calculate figures for your county. Re-type the copy, double-spaced, before submitting it for publication. The story can also be adapted for radio, newsletter, or other use.

How important are volunteers to the 4-H program?

"They're indispensable," says _______ _______ County Extension Agent, who points out that the observance of National Volunteer Week April 20-26 provides a chance to recognize the efforts of the (total number) volunteers working with the 4-H program in _______ County.

In _______ County alone, 4-H project leaders contribute nearly _______ "work years" annually to the 4-H program. The figure was arrived at by converting the average time reported in a statewide survey into 40-hour weeks, 52 weeks a year.

If volunteer time is assigned a conservative dollar value of $2.90 (federal minimum wage at the time of the survey), _______ County project leaders each year donate the equivalent of $______ in time to the 4-H program. These same leaders also contribute other resources to the program in the form of refreshments, supplies, telephone calls, and car mileage.

Project leaders spend most of their time with youth in meetings or activities such as fairs, participation days, and tours. Other significant amounts of time are spent participating in leader training and county-wide planning committees. According to the survey figures, project leaders report spending about 138 hours a year on 4-H business.

Project leaders are not the only volunteers in the 4-H program. Leadership roles have expanded to keep pace with the program opportunities and the changing interests of volunteers. Volunteer roles for adults in _______ County 4-H include _______.

"It is clear," _______ _______ notes, "that volunteers help Extension expand its resources to include more people than could ever be reached by professional staff alone, while increasing and broadening the impact of 4-H."

Volunteer 4-H leaders have face-to-face contact with 4-H members and do nearly all of the direct teaching of youth in the program, _______ explains Extension professional staff provides training and support for these volunteers and is responsible for program direction and change.
CONTRIBUTIONS OF ADULT VOLUNTEER 4-H LEADERS IN OREGON

Please estimate the number of hours you spent on the following activities each month of last year (Oct. 1976 - Sept. 1977):

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<tr>
<th>Activity</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
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<th>May</th>
<th>June</th>
<th>July</th>
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<tbody>
<tr>
<td>Preparing for local 4-H club meetings or activities</td>
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<td>Participating in local 4-H club meetings or activities</td>
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<td>Receiving 4-H leader orientation or training</td>
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<td>Recruiting 4-H members (or leaders)</td>
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<td>Participating in county-wide 4-H activities</td>
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<td>Serving on statewide 4-H committees (advisory, development, or activity)</td>
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<td>Participating in statewide 4-H activities</td>
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<td>Providing transportation for self or others to 4-H meetings or activities</td>
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<td>Filling out reports, reading newsletters, making phone calls or personal contacts</td>
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Please estimate your contribution to 4-H in each of the following areas last year (Oct. 1976 - Sept. 1977):

- Total number of phone calls made
- Total amount of long distance or pay phone charges
- Total number of persons you served refreshments
- Total number of miles driven on 4-H business
- Total value of supplies you furnished to members (i.e. paper, pencils, art supplies, food other than refreshments)

List any other tools/equipment you provide for 4-H (i.e. shop equipment, sewing machine, kitchen facilities, horse arena etc.). Please explain and indicate frequency.
1. How long have you been a 4-H project leader and/or community coordinator? (Include 1977-78.)
   ____ 1. Project leader: _______ years
   ____ 2. Community coordinator: _______ years

2. (If a project leader) How many 4-H members were in your group last year?
   ______ members

3. (If a project leader) How many times did your group meet last year?
   ______ times

4. (If a project leader) About how long was an average meeting?
   ______ hour(s)

5. Listed below are some ways 4-H leaders can learn about their roles. Please check (√) how helpful you've found each information source to be:

<table>
<thead>
<tr>
<th>Information Source</th>
<th>Very helpful</th>
<th>Somewhat helpful</th>
<th>Not helpful</th>
<th>Never used</th>
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<tr>
<td>4-H member project material</td>
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<td>4-H project leaders' guide</td>
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<td>4-H Leader Handbook (has nine sections)</td>
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<td>Magazines</td>
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<td>Leader training meetings</td>
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<td>Other leaders and friends</td>
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<td>Own knowledge and experience</td>
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<td>Other (please explain):</td>
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6. Do you have a child (or children) now participating in 4-H?
   ____ 1. Yes
   ____ 2. Not now, but have in the past
   ____ 3. No, never
   ____ 4. Do not have children

7. Were you ever a 4-H member yourself?
   ____ 1. Yes (in what state? ____________ )
   ____ 2. No

8. Sex:
   ____ 1. Male
   ____ 2. Female

9. Marital status:
   ____ 1. Never married
   ____ 2. Married, spouse lives at home
   ____ 3. Separated, divorced, widowed

10. What county do you live in? _______________________

11. Are you now employed outside your home?
    ____ 1. No
    ____ 2. Yes, employed part-time
    ____ 3. Yes, employed full-time

12. What was your age on your last birthday? ______ years

13. What is your educational background? (Choose only one response.)
    ____ 1. Attended elementary school
    ____ 2. Completed elementary school
    ____ 3. Attended high school
    ____ 4. Completed high school
    ____ 5. Attended college or university
    ____ 6. Completed college or university

14. What is your yearly gross family income?
    ____ 1. Under 4,000 dollars
    ____ 2. 4,000 - 7,999
    ____ 3. 8,000 - 9,999
    ____ 4. 10,000 - 14,999
    ____ 5. 15,000 - 19,999
    ____ 6. 20,000 or more

15. We are interested in hearing any comments you might have concerning the Oregon 4-H program and your role as a 4-H leader. Please feel free to write down your thoughts on a separate sheet of paper and return it to us with your questionnaire.

   THANK YOU FOR YOUR COOPERATION!

Oregon State University Extension Service