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ABSTRACT
        The Reflective Appraisal of Programs (RAP) approach
allows county extension staff (in cooperation with volunteer leaders,
specialists, and district staff) to obtain systematic evidence on
results that participants perceive to have occurred in the months or
years following their involvement in an extension program. Simpler
than a "cookbook" for documenting results of extension programs, RAP
resembles a "package mix." RAP contains standard components that can
be easily adjusted or added to in order to create a study tailored to
specific needs. Standardized interview questions used in a RAP study
are applicable to the clientele of almost any extension program. This
"RAP package" contains an introduction to the program and three
publications. The first publication provides a rationale, featuring
RAP's unique features and its relation to other approaches for
evaluating extension programs. The second and third publications
include a guide and an accompanying workbook, which present
step-by-step instructions and planning aids for implementing a RAP
study. (AH)

Reflective Appraisal of Programs (RAP)

An Approach to Studying
Clientele-Perceived Results
of Cooperative Extension
Programs

Introduction

Rationale

Guide

Workbook

by Claude F. Bennett
Program Analyst
Program Development
Evaluation and Management Systems
U.S. Department of Agriculture

1982

2

**Reflective Appraisal
of Programs (RAP):**

**An Approach to Studying
Clientele-Perceived Results
of Cooperative Extension
Programs**

Introduction

by Claude F. Bennett*

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Overview of Reflective Appraisal of Programs (RAP)

People who make or influence decisions regarding the direction and resources of extension programs in counties have a growing need for *systematic evidence* on the results of the programs. Using the Reflective Appraisal of Programs (RAP) approach, county extension staff (in cooperation with volunteer leaders, specialists, and district staff) obtain such systematic evidence by documenting the results that participants perceive to have occurred in the months and years following their involvement in an extension program.

The RAP approach has already been used to study a wide range of extension programs in counties, including:

- Swine disease control program
- Community recreation education program
- 4-H environmental education program
- Summer telephone advisory program on fruit and vegetable preservation
- Homemaker club program
- Integrated pest management program
- Consumer education program
- Teenage sex-education program
- 4-H home fire-prevention program
- Handicraft marketing program

Simpler than a "cookbook" for documenting the results of extension programs, RAP resembles a "package mix." That is, RAP contains standard components that can be easily adjusted or added to in order to create a study tailored to specific needs. The standardized interview questions used in a RAP study are applicable to the clientele of almost any extension program. By "plugging" selected program activities into these questions, extension field staff obtain participants' perceptions of the results of a program in which they were involved.

How Does RAP Work?

- RAP relies on perceptions or "reflective" evidence on the results of the program being studied. Program participants estimate *(reflect* upon) the extent to which a program brought about change and "payoff."

- Interviews are conducted, usually by telephone, with a minimum of 30-40 program participants per county. RAP can be used to study the results of extension programs in extension areas and districts as well as in counties.

- RAP uses standardized interview questions that can be adapted to extension programs on a wide variety of subject matters and using a variety of educational methods.

- In leading a RAP study, a county extension staff member needs to expend a total of 40-50 hours.

Who Implements a RAP Study?

We suggest that county extension staff involve volunteer extension leaders and extension district, regional, area, and state staff in the planning and implementation of their RAP studies. Included in this RAP team should be people who make or influence decisions about the program being studied.

What Are the Steps of a RAP Study?

As a RAP team conducts a study, they follow the six steps listed below. The RAP guidebook and workbook help "guide" them through this process.

1. Select a program for study.

2. Prepare a description of both the activities of the program selected and a complete list of who participated in the program during the past months to years.

3. Select specific levels of evidence (as defined below) to be collected regarding the results of the program.

4. Interview program participants or a sample of the participants on what they perceive to be the results and value of the program.

5. Use the findings of the interviews to draw conclusions about and appraise (evaluate) results of the program.

6. Recommend how decision makers can use the findings, conclusions, and appraisals.

Sample Interview Questions

A program participant being interviewed is first reminded of the activities (educational methods and topics) of the program being studied. Interviewees then indicate the extent to which they participated in these activities and respond to standardized questions on the results of the program. RAP can help get evidence on program results at the following levels: *reactions* to program activities; *KASA change* (knowledge, attitude, skill, and aspiration change); *practice change;* and *end results* of KASA change or practice change.

The following is a list of possible educational methods and subjects from programs on energy conservation. By "plugging" these examples into the sample RAP interview items in this publication, you will be able to better understand how the interview questions can be adapted to virtually any extension program.

Home economics
Methods: meetings, newsletters, TV spots
Subjects: purchase of energy-efficient household appliances

Agriculture
Methods: demonstrations, interactive computer with videotext, farm visits
Subjects: solar grain-drying methods, machinery

Community development
Methods: regional meetings on analyses of public records
Subjects: intercommunity cooperation in cutting costs of ambulance services

4-H Youth
Methods: club meetings, individual projects
Subjects: daytime and nighttime temperature control for home heating

The following question is designed to measure participants' *reactions* to a program's activities.

Say to the interviewee:
To what extent did the (educational method) on (program topic) meet your expectations at the time?

Then read the interviewee the following answers and have him or her choose the answer that most nearly describes the way he or she feels.

_____ to a great extent
_____ to a fair extent
_____ to a slight extent
_____ not at all

Check whichever response the interviewee provides.
Provide a space to indicate if the person answers "don't know" or "don't recall."

Try to find out specifically what the interviewee meant by his or her response by following up with a probe (open-ended) question such as either of the following:

● Please explain your answer a little more fully.

● Would you give me an example of what you mean by your answer.

The following question is designed to measure participants' *practice change* (application of the content of the program in which they participated).

Say to the interviewee:
To what extent have you put to use the ideas or skills you learned regarding (program topic)?

Then read the interviewee the following answers and have him or her choose the answer that most nearly describes the way he or she feels.

_____ to a great extent
_____ to a fair extent
_____ to a slight extent
_____ not at all

Check whichever response the interviewee provides.
Again, find out what the interviewee meant by his or her response by following up with a probe question such as either of the following:

● Please explain what you mean a little more fully.

● Would you give me an example of what you mean.

The above format can also be used for interview questions at the other levels of evidence to find out how much clientele have learned through their participation in the program, the positive or negative effects of applying what they learned, etc.
The wording of the questions can be modified as necessary, and other types of questions can, of course, be included (for example, how participants became aware of the program and their reasons for participating).

The "RAP Package"

The "RAP package" contains the following three publications:

Reflective Appraisal of Programs (RAP): An Approach to Studying Clientele-Perceived Results of Cooperative Extension Programs—Rationale. (Presents RAP's unique features and its relation to other approaches for evaluating extension programs.)

Reflective Appraisal of Programs (RAP): An Approach to Studying Clientele-Perceived Results of Cooperative Extension Programs—Guide and *Workbook.* (These present step-by-step instructions and planning aids for implementing a RAP study.)

RAP is based in part on two USDA publications by Claude F. Bennett: *Analyzing Impacts of Extension Programs,* ESC-575 (1976) and *Teaching Materials on "Seven Levels of Evidence": A Guide for Extension Workers,* ESC-575 (1980).

Additional copies of the RAP package may be ordered
for $2.00 (New York State residents) or $2.50 (out-of-
state residents) plus postage and handling. Minimum
order: $10.00. Address all inquiries to:

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Reflective Appraisal of Programs (RAP):

An Approach to Studying Clientele-Perceived Results of Cooperative Extension Programs

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Rationale

by Claude F. Bennett*

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Contents

Preface

This publication is intended for extension administrators, program staff, and evaluation staff who wish to understand why extension staff are being encouraged to use the Reflective Appraisal of Programs (RAP) approach to study the results of extension programs. The rationale provided herein may be especially useful to state, district, and county directors of extension who set policies for extension program evaluation efforts. Companion publications in the "RAP package"—a guide and accompanying workbook—present step-by-step instructions and "planning aids" for extension staff who wish to implement a RAP study. RAP is based on the premise that county extension staff should take a leading role in studies of extension program results in counties.

This publication focuses primarily on the strengths of one approach—Reflective Appraisal of Programs (RAP)— for determining and appraising (evaluating) results of extension programs in counties. A secondary focus is on the validity of perceptual or reflective data. Comments on how extension staff can be trained in the RAP approach also are included.

RAP is only one of several possible approaches to formal program evaluation within state extension services. Other strategies include, for example, state-level studies of extension program results (as developed recently in Wisconsin and Ohio); a combination of state and county studies (as developed in Michigan, North Carolina, and West Virginia); and county extenson program reviews (as developed in Florida).

State program staff may find this publication helpful in determining how they might assist county extension staff in evaluating program results. State program evaluation specialists may find the publication useful in clarifying and modifying their role in helping state and county program staff with extension program evaluation.

Acknowledgments

Need for a Method to Study Results of County Extension Programs

Public and private funding for extension programs can be justified in several ways. First, extension, like other organizations, makes *promises* to people who finance its programs. These promises generally are statements of need and associated goals that are included in extension program and plan-of-work documents, budget justifications to policy makers and legislators, and public relations releases.

Another way to justify funding is by *claiming accomplishments* for past extension programs. Such claims generally are based on the casual observations of program personnel or on testimony from a few hand-picked program participants. Sometimes, such claims are based on evidence of improved social or economic conditions, which the program is *assumed* to have produced or helped produce.

Promises and claims will continue to be important, especially in areas where funders already view extension favorably; legislators and policy makers who have had positive experiences regarding extension want to believe it is giving the public its money's worth. On the other hand, in areas where legislators and policy makers are unfamiliar with extension, or for some reason question its effectiveness, a third way to justify budgets is rapidly growing in importance: *documented studies* of the results of extension programs. Such studies are being used increasingly to meet funders' accountability requirements and to help extension develop improved programs. These scientific studies generally are conducted by social scientists, program analysts, and evaluation specialists at state, multi-state, and national levels. At times, program staff conduct or participate in these studies.

Studies of the results of nationwide extension programs are conducted for Congress and federal executives, while studies of the results of statewide extension programs are conducted primarily for state legislators, state agencies, university administrators, and other interested parties. State and national studies usually are supported by special budgets and take months to conduct.

Documenting Program Results in Counties

How do studies of the results of extension programs in individual counties fit into the overall pattern of extension accountability and program improvement? Systematic evidence on the results of programs is apparently often needed at the county level. County agents need such evidence to modify programs and to be accountable within extension, but there is also growing pressure from county legislators and executives for credible, generalizable, clientele-based evidence on program results. In addition, some volunteer extension program-development committees are requesting accountability information. Pressure for county-level studies tends to increase as the proportion of extension funding supplied by county revenues increases, as the county becomes more urbanized, and as public or private funding for special programs in the county increases.

A recent national survey on program evaluation in extension obtained responses from a representative sample of 1,520 county extension agents. One finding showed that 29 percent of the county agents viewed formal evaluations as "useful for the purposes of accountability reporting outside the extension organization." The authors of the study commented that "in states in which county extension programs are heavily dependent upon funding from county sources there is a tendency for county staff members to be strongly aware of a need to be actively engaged in formal program evaluation for the purposes of accountability.... (These) county staff not only accept the need for formal, accountability-focused evaluation but are interested in being able to more effectively conduct such evaluation."[1]

A related set of findings from the same survey indicated agents' average ratings of the usefulness of formal program evaluation for various purposes. On a five-point scale (5=very great extent, 4=great extent, 3=some extent, 2=small extent, 1=no extent), their average ratings were as follows:

- for purpose of revising and improving existing or continuing programs (4.3)

- for assessing new programs (4.2)

- for accountability reporting *inside* the extension organization (3.8)

- for accountability reporting *outside* the extension organization (3.6)

- for assistance in administrative decision making (3.5)

- for satisfying requirements of specially funded programs (3.3).

[1] James L. Summers, Robert W. Miller, Cecil E. Carter, Richard E. Young, Carolyn Dempsey-Foss, Lee Beaumont. *Program Evaluation in Extension: A Comprehensive Study of Methods, Practices and Procedures.* Morgantown, W. Va.: Office of Research and Development, West Virginia University, 1981, pp. 19-20.

Directors of state extension services are asking county extension agents for well-substantiated reports on the accomplishments of extension programs in order to provide state and federal funding sources with examples of extension's impact. In connection with a symposium on the evaluation of extension programs,[2] approximately 25 individuals directly responsible for formal evaluation of extension programs commented on federal, state, and county evaluation needs. By and large, their comments implied a need for county extension staff competency in program evaluation. A few of their comments follow.

In regard to the three levels of evaluation needs, I believe the most pressing need rests with the staff at the local program level. . . .

We specifically need evaluation for accounting to county and state government. The form and content may vary between what is needed by county commissioners and by state legislators. . . .

Can the meeting of needs for evaluation at the county level be structured in a way that will help to meet needs at the state and federal level as well? If so, how?

Are actors at all levels of government asking questions? Do we have to evaluate for all the various actors every time we evaluate?

How can we enhance coordination at all three levels?

There is an unquestionable need for separate but coordinated studies of program results at the national, state, and county levels. National studies draw evidence from several and sometimes all states; state studies draw evidence from several and sometimes all the counties in a state; but county studies draw evidence from, and may be generalizable to, a single county. State studies of extension program results can be used to *exemplify* national program results, and county studies to exemplify state and national results.

Who Should Conduct Studies of County Extension Programs?

Should or can county extension staff conduct studies of the results of programs in individual counties? Regarding who should participate in extension program evaluations, below are some relevant questions raised by some of the attendees of the symposium cited above.

How should we approach evaluation at the local level? Has our motivation of local staff to evaluate been handled properly? How can staff really be helped?

What type of entry-level background is needed for extension agents to be able to conduct program evaluation?

Local extension staff are educators with the responsibility for delivering subject matter in some specific area of expertise. As educators, they are expected to have the competencies that professional educators possess—the ability to design, deliver, and evaluate programs. Without all three competencies they are not effective educators and in reality operate intuitively rather than professionally.

The local extension staff definitely needs training and assistance in evaluating local programs. . . .

To what extent should local-level staff do program evaluation versus state specialists and/or state-level evaluation teams?

Evaluation specialists seldom are available to conduct studies of program results in single counties or even groups of counties. And if county staff in a state annually conduct dozens of studies primarily for county decision makers, state evaluation specialists will be unable to provide much assistance to each study. Thus, county extension staff must take major responsibility for meeting identified county needs for documented studies of program results.

In a number of state extension services, county staff are urged to collect, analyze, and interpret evidence in order to evaluate the results of extension programs. But staff frequently reply: "First, show us *how* to get credible evidence of program results without spending an incredible amount of time doing it!"

Most county extension staff do not have sufficient time or training to engage in rigorous evaluative research; they want simple and acceptable procedures for documenting the outcome of their work. They want information on the results of their programs that is of sufficient value to justify the work required to obtain it. In other words, they want information that will improve their accountability, their programs, their understanding of the programming process, and/or their morale and satisfaction.

[2]M. F. Smith (ed.). *Current Issues/Problems in Evaluating Cooperative Extension Programs: A Symposium* Gainesville, Fla. Cooperative Extension Service, University of Florida, 1981. pp. 97-99.

1i

RAP: A Feasible Approach County Extension Staff Can Use to Study Program Results

Compared with the expectations of extension administrators and their own expectations, county staff seem to obtain too little systematic evidence on program results. Limited time and insufficient training are among the reasons systematic evidence is not obtained; another reason is that, until now, there was little in the way of a practical, general method county staff could use to conduct such studies.

Using RAP's simple and acceptable method, county extension agents can now systematically document program results, and they don't have to spend an undue amount of time doing it. For example, an agent can obtain systematic evidence on the results of a one- to three-year extension beef-breeding program. Initial training generally would take about one day; conducting the study generally would take five or six agent workdays.

What is a "credible" amount of time that an agent should spend studying the results of a program in a county? Let's assume that an extension program requires 300 agent-hours per year (seven and one-half weeks). Then 45 hours would amount to 15 percent (45/300) of the time expended on the program. Furthermore, if RAP is used to study such a program conducted over three years, then the study would take only 5 percent of the total programming time. Finally, keep in mind that 45 hours is only about 2 percent of an agent's total annual programming time, assuming 1,800 hours are spent on programming per staff year.

Features of RAP that Encourage Its Use by County Extension Staff

1. *RAP is a simple, nonthreatening procedure for studying program results.* RAP helps agents get a quick start at studying results of one of their programs. RAP emphasizes agent skills in group process rather than technical methods of program assessment. RAP standardizes and simplifies acceptable program evaluation methods for those with limited experience in formal evaluation.

2. *RAP provides steps for studying the results of practically any extension program.* With RAP's standardized interview items, agents simply "plug in" the educational methods, subject matters, and expected end results of the program being evaluated. This innovative, easy-to-use, "fill-in-the-blanks" method enables county staff, with minimal assistance, to evaluate the effectiveness of their programs. Specifically, RAP is a standardized application of a levels-of-evidence model for evaluating the results of extension programs.[3]

RAP's interview items cover a broad range of events and consequences, rather than a narrow and detailed scope. The general nature of RAP's interview items allows a broad base of material to be covered within the confines of a brief interview.

3. *RAP applies to programs aimed at developing individuals and groups as well as programs aimed at improving economic and social conditions.* Included in a program on building management decision making among farmers and homemakers might be program content on evaluating and utilizing information; in a program for 4-H youth on building strong interpersonal relationships, generalizations about how humans perceive things and form attitudes might be included; and in a program for community leaders on meeting community needs, procedures for identifying and assessing these needs might be presented. The RAP items can be modified for any of these kinds of content areas. They also can be adapted equally well to the educational content of programs to improve economic and social conditions. Such programs might include facts on fertilizers, animal and human nutrition, or water supply technologies.

[3] Claude F. Bennett, *Analyzing Impacts of Extension Programs*, ESC-575, Extension Service-USDA, 1976. Claude F. Bennett and Donald L. Nelson, *Analyzing Impacts of Community Development*, Mississippi State, Miss.: Southern Rural Development Center, Mississippi State University, 1975.

4. *RAP provides an "on-the-job" method for evaluating program effectiveness.* RAP provides more valid evidence of program results than casual observation would provide. In terms of Exhibit 1, RAP helps field staff advance from "self-checking evaluations" to studies done "on the job."

Exhibit 1
Degree of Complexity and Validity in Program Evaluation Procedures

Snap Judgments	Self-Checking	On-the-Job Studies	Special-Assignment Studies

← Lesser　　　　　　　　　　　　　　Greater →
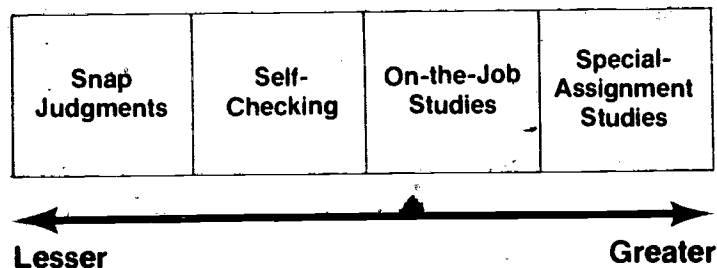
As important as self-checking evaluations are, they can be very misleading. They are subjective appraisals by the *provider* of a program and as such can contain unacceptable error due to unconscious bias.[4]

RAP studies may not rival those by people who have special part- or full-time assignments conducting studies. RAP studies are, however, as complex and valid as "on-the-job" studies by county staff can be expected to be. By taking an active role in studying how clientele view the effectiveness of extension programs, county staff gain firsthand insight into how to improve both their programs and their methods of reporting to resource allocation and support groups.

RAP encourages program personnel to participate in the collection and analysis of data, rather than rely on independent evaluators. Extension staff who implemented the program under study should do part of the interviewing and participate in the analysis and interpretation of the data. Firsthand discovery can enhance agents' acceptance of the study's findings and can motivate them to act upon such findings by presenting them with evidence from a cross section of the program audience.

RAP exemplifies a trend toward inclusion of nonresearchers in evaluations of educational programs. Windle suggests that as part of the natural history of a profession some of the skills become routine so that less specialized groups can perform particular roles in the profession.[5] RAP is designed to assist those who have not specialized in program evaluation to perform a significant role in the formal evaluation process. With RAP, more counties can systematically evaluate their programs than is possible when they depend upon program evaluation specialists.

5. *RAP encourages field staff supervisors, state program specialists, and volunteer leaders to help collect and use the evidence obtained from the study.* Participation in RAP by volunteer leaders and state and district extension staff has several advantages:

• People who conduct a study generally are more disposed to believing and using the findings than those who receive only a report of the findings.

• Whereas a county agent may invest as much as 45 hours in a RAP study, 135 hours might be required to plan and implement the study. Thus, a team approach generally is most feasible.

If one assumes that extension has a responsibility to help build community and business leaders' ability to systematically evaluate the effectiveness of public programs, then by encouraging volunteer leaders to participate in the study, extension is fulfilling that goal. Lay (volunteer) committee members, county extension chairpersons (in cases where they do not lead the RAP study), district agents, and specialists are encouraged to conduct half or more of the RAP interviews. The county staff member leading the study conducts the remainder of the interviews under such an arrangement.

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[4]This may be illustrated by the following example. "In a program of teaching speech to deaf children, teachers initially found the children's speech unintelligible. After teaching for six months, the teachers felt that the children's ability to make themselves understood had increased dramatically. However, data collected during the course of the training indicated otherwise. Tape recordings of the children's speech were taken at regular intervals during their training. Impartial observers who listened to the recordings could not distinguish when given recordings by the children were taken—early in their training or late in their training. What apparently happened is that the teachers had learned the linguistic code of the children: the teachers had changed—not the children." See John M. Gottman and Robert E. Clasen, *Evaluation in Education.* Itasca, Ill.: F. E. Peacock Publishers, Inc., 1972, p. 2.

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[5]Charles Windle, "Trends and Problems in Non-Researcher Participation in Program Evaluation," presented at the annual meeting of the Evaluation Research Society, Nov. 19-22, 1980, Arlington, Va.

Validity of Reflective Evidence for County Users of Evaluation

RAP depends on *reflective* evidence, so-called because the interview procedure requires program participants to reconstruct *(reflect* upon) their feelings, behavior, and condition before, during, and following their participation in the program being studied. Interviewees 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—"reflective" evidence—is one way to deal with the attribution problem, namely, to what causes or influences a change is attributed. For example, in an area where farmers increased their production, what demonstrates that extension had a part in bringing about the change?[6]

Some social scientists, including some program evaluators, maintain that the only way to obtain adequate evidence of program results is by observing what clientele actually do and receive as a result of program participation. Such analysts contend that: (a) what clientele perceive, believe, and say are the results of their participation in a program is invalidated by what they *want* to believe in order to feel good about themselves and their past actions; and (b) that reflective evidence is invalidated by memory loss or distortion.[7] People who accept this position are *objectivists*, for they favor using a natural or physical science model for evaluation studies.[8] Objectivists rely on rigorous study designs to exclude or take into account other causes of clientele change besides extension.

Analysts who maintain an interpretive or *subjectivist* position[*] emphasize that human experience *is* perception and that perception should thus be a focus of study.

Such analysts believe that it is both necessary and generally more feasible to obtain evidence on what clientele say they perceive to be the results of program participation. Subjectivists maintain that it is necessary to obtain the *meaning* of a program to its participants. For example, analysts who use perceptions to study program results maintain that:[9]

● Perceptions allow respondents to interconnect events and to identify the cumulative effects of multi-year, multi-method programs.

● Perceptual data are more easily understood by study users who may not understand how numbers of changes in people or institutions indicate the value of a program.

The intent here is not to contribute to the objectivist-subjectivist debate, but rather to assert that subjectivist (e.g., reflective) evidence is appropriate for county studies of extension programs for many reasons, including:

● Reflective evidence can be collected from program participants *after* their participation rather than both before *and* after and from both participants and nonparticipants (comparison or control groups).

● RAP's "closed-end" (multiple-choice) interview items permit many possible specific answers to be recorded and aggregated within a few general response categories. For example, if a question asks the extent to which program participants implemented skills learned from an extension program, two respondents might both say that they put to use "to a great extent" the ideas or skills they learned about prevention of home burglary. One participant may have installed a superior door lock; the other may have inscribed identification numbers on his or her possessions.

● Reflective evidence generally will be acceptable to the principal users of the findings—agents themselves, campus staff, volunteer committee members, county legislators or commissioners, state legislators, and others who are "close to the extension programming process." Such people know enough about local extension programs to assess for themselves the validity of the findings and to interpret the findings in the context of their existing knowledge.

● The information on program effectiveness that is gleaned from a RAP study is far more complete and valid than that found in most county-level extension reports.

Summaries of RAP studies can be included in routine channels for internal accountability and in regular means for reporting to county and state funding bodies and the public.

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[6]Claude F. Bennett, *Analyzing Impacts of Extension Programs,* ESC-575, Extension Service-USDA, 1976, pp. 15-20.

[7]See, for example, Peter H. Rossi and Sonia R. Wright, "Evaluation Research," *Evaluation Quarterly,* Feb. 1977; also, Mary Ann Scheirer, "Program Participants' Positive Perception: Psychological Conflict of Interest in Social Program Evaluation," *Evaluation Quarterly.* Feb. 1978.

[8]See Ernest R. House, *Evaluating with Validity*, Beverly Hills, Calif.: Sage Publications, 1980.

[9]Laverne B. Forest and Mary G. Marshall. *Impact of Extension in Shawano County. Methodology.* Madison, Wisc.: Program and Staff Development, University of Wisconsin-Extension, 1978.

14

Reducing and Minimizing Potential Problems

Like any technique, RAP has limitations and potential problems; these problems can, however, be reduced and kept to an acceptable minimum. Five potential problems are identified below, along with suggestions on how to reduce or minimize them.

1. *Vested interests of extension staff will bias the study.* Bias generally can be minimized if the study is conducted by a team representing county, district, and state extension staff and volunteer extension leaders. Each of these groups has different biases and vested interests, so biases will tend to cancel each other out. The recording of open-ended responses is particularly subject to interviewer bias; if several interviewers conduct the interviews, however, a more valid pattern of responses should be obtained.

It is most important that all those involved in a RAP study be aware of the self-defeating effects of bias. RAP studies will lose credibility if their audiences find bias in them.

Finally, competency in the use of the RAP approach is perhaps the best guard against bias.

2. *Lack of evaluation expertise by extension program staff can reduce the accuracy, completeness, and usefulness of the study's findings.* Trial RAP studies in Ohio and New York State indicated that extension staff teamed with lay leaders could do accurate and useful studies. As extension becomes more familiar with RAP, there will be an increasing number of exemplary RAP studies and increasing numbers of people experienced with the process.

3. *RAP's standardized interview items may elicit results that are too general, vague, or incomplete.* If the evidence from a RAP study is too general or spotty to adequately cover the results of the program being evaluated, then perhaps the scope of the study was too wide or not well adapted to the particular situation. RAP's probe items will detect with some precision examples of what people did and/or received as a result of their participation in the program being evaluated. It is the responsibility of the RAP team to ensure that areas that are not sufficiently addressed in the standardized items are covered in additional locally developed interview items.

The staff implementing a RAP study may need assistance from a program evaluation specialist to ensure that the scope of the study is manageable. Such specialists also may be helpful in constructing or adapting interview items directed at issues that are not sufficiently addressed by the standardized items.

4. *Reflective evidence on the results of a program may be based more on the interviewees' overall attitude toward extension and its personnel than on their perception of the actual results of the program being studied.* People who feel positive toward something usually hesitate to admit to themselves or to anyone else that the *results* of that something (in this case a particular extension program) were not positive or beneficial. This tendency can be minimized, however, by judicious use of the open-ended (probe) follow-up questions suggested in the RAP guidebook.

If a significant portion of the respondents are unable to provide specific examples to support their general assessment of the results of their participation in a program, then the interpretation of the study's findings should reflect this. Furthermore, responses to the standardized items should be interpreted in light of their consistency or inconsistency with the open-ended responses.

A study of a program with a relatively limited scope is more likely to adequately elicit interviewees' perceptions about the results of a program than a study with a broader scope.

5. *Reflective evidence may be invalid or not sufficiently complete if program participants have forgotten the effectiveness of the program.* People frequently forget where or from whom they learned something. Thus, for a RAP study to be most valid (a) less than two years should have elapsed since the interviewees participated in the program, and (b) the program should have been distinct and forceful. Several additional techniques can minimize the effect of memory loss: (a) Adequately but succinctly describe the program to interviewees to refresh their memories of the program and their participation in it; (b) send a copy of the interview instrument to interviewees for review before the interview; and finally, (c) use the open-ended questions to determine whether an interviewee has a solid basis for his or her estimates of changes resulting from the program.

Summary

The Reflective Appraisal of Programs (RAP) approach provides county extension staff with a simple method for obtaining clientele-perceived assessments of the results of extension programs. Furthermore, the method is consistent with the readiness, strengths, and limitations of extension agents to conduct such studies.

The "RAP package" includes the following:

- Guidelines for selection of the program most in need of systematic study.

- Levels of evidence that can be used to describe and evaluate clientele-perceived results.

- Standardized but modifiable questions for eliciting information from participants regarding results of the program in which they were involved.

- Guidelines for analysis, interpretation, and utilization of the study's findings.

Exhibit 2 on page 9 summarizes the advantages of RAP and how to minimize potential problems.

15

Appendix: The Role of RAP in In-Service Education for Extension Staff

Hundreds of articles and books have been published over the past 10 years on program evaluation, and dozens on extension program evaluation. Specific, standardized procedures, however, rarely are included in such publications. I developed RAP because I found other approaches to evaluating program effectiveness could not be taught in brief workshops on extension program evaluation. Proof of RAP's success was quickly evident. After I began to use RAP's standardized approach, participants' ratings of workshops where I presented the approach rose dramatically.

RAP grew out of two professional experiences, one lasting over several years; the other, several months. The first experience—a frustrating one (a feeling shared perhaps by other program evaluation workshop instructors)—involved attempting to teach field staff within one day how to study program results. (Invitations from state extension services to provide such in-service education rarely were for more than one day.) The second experience—a successful one—involved helping an individual area extension staff member conduct a study of program results.

I tried two approaches at the one-day workshops, but found both unworkable. First, I presented optional ways of studying program results, thereby helping the trainees select from many alternative methods for obtaining evidence to evaluate their programs. Advantages and disadvantages of various methods of obtaining data—interviewing, mail questionnaires, observations—were presented (see Exhibit 3). Within the confines of the brief training session, however, most county staff were unable to develop an evaluation plan, given the "mind-boggling" number of possible methods of (a) categorizing program results, (b) involving people in evaluation procedures, and (c) measuring program results.

Providing workshop trainees with a variety of sample questionnaires, observation devices, and other instruments that have been used in evaluation studies did not help much either. As the participants tried to figure out a method to measure the results of their own work, they realized that few, if any, of the instruments fit their specific needs.

The second approach I tried, also in brief workshop situations, was to lead field staff trainees through a sample evaluation study. This case study approach had two advantages: (1) It enhanced communication during the workshop as the study and findings were discussed, and (2) it simplified the content of the workshop by reducing the number of evaluation methods being presented. But, by focusing attention on one study, however exemplary the study may have been, I tended to lose the interest of the majority of the staff participating in the training. Extension staff have extremely diverse interests; they deal with vastly different audiences and subject matters. Within the same county, for example, some agents are interested in solving housing problems and clothing problems, while others are involved in solving livestock and grain problems. Within a single program area such as 4-H, programs may be vastly different, too, even within the same county. Staff are interested in finding out how to better document the results of their own programs, not in how someone else obtained such documentation.

The critical question seems to be this: How can the program evaluation methods discussed in a workshop be sufficiently specific to be easy to explain and easy to use, yet applicable to the extremely broad range of interests of extension staff? One answer is RAP. Its innovative, standardized interview questions allow program staff to "plug" practically any subject matter and educational method into its items. RAP is a specific technique for evaluating a program, yet it can be adapted to studies of practically any extension program, subprogram, or phase of a program.

The second experience that led to the development of RAP was my work with a former extension agent in Oklahoma, with whom I conducted a study on the results of a community development program.[10] This study demonstrated in detail how the levels-of-evidence model,[11],[12] could be applied to an evaluation of a multi-county program. RAP is a modification of the methods and interview items we used in that study. Once the references to the specific content and/or processes of the Oklahoma program were removed from the interview items, we were left with the first approximation of the "content-free" items that are introduced in RAP.

By presenting prestructured items within an overall planning, implementation, and utilization strategy, RAP makes it possible for county staff to produce well-documented, comprehensive evaluations.

[10]Claude F. Bennett and Marvin D. Oldham. *Extension's Role in a Concerted Effort Toward Rural Development: Analysis and Evaluation.* Stillwater, Okla.: Cooperative Extension Service, Oklahoma State University, 1976.

[11]Claude F. Bennett and Donald H. Nelson, *Analyzing Impacts of Community Development,* Mississippi State, Miss.: Southern Development Center, Mississippi State University, 1975.

[12]Claude F. Bennett, *Analyzing Impacts of Extension Programs,* ESC-575, Extension Service-USDA. 1976.

Exhibit 2
Summary of Strengths of RAP, with Corresponding Potential Problems and Suggestions for Minimizing Problems

Advantages of RAP	Potential Problems	How to Guard Against
A. Organizationally Relevant		
1. Serves primarily county-level decision makers.	RAP will not suffice in providing the information on program results needed by state-level decision makers.	Formulate complementary plans for meeting state-level decision makers' information needs.
2. Planning aids and standardized items for interviews help reduce time needed to study extension program results.	Staff who implement RAP may not grasp the logic behind program-evaluation study procedures. RAP users may fail to realize that RAP is only one of many program-evaluation methods.	Encourage staff to use RAP as an initial method to study program results but to employ other methods as their skills grow. Offer opportunities to learn about program-evaluation methods other than RAP.
B. Methodologically Relevant		
1. Volunteer leader participation in studies of program results ensures study legitimation, utilization, and assistance.	Reduced control of interviewing procedures, analysis, and confidentiality.	Select participating lay leaders carefully according to education, experience, and openness to training needed for their role in RAP.
2. RAP's standardized approach to program description and interview items covers most essentials while saving staff time.	RAP evidence may be too vague to be meaningful. Interviews may not elicit evidence on program nuances, critical incidents, and some types of program results.	Reduce the scope of RAP studies. Encourage RAP users to adapt and supplement standardized procedures as necessary.
3. Reflective evidence on program results is easier to obtain than evidence obtained both before and after a program, requires minimal time, and permits estimates of results of *combined* educational methods/content.	Interviewees' estimates of program results may be affected by their attitudes toward program personnel or extension or by limited recall ability.	Rely on probe questions to discount interviewee responses that seem to have no factual basis. Encourage "don't know/don't recall" responses when applicable.
4. RAP is a "do-it-yourself" method that does not require resources/guidance/control of the study by evaluation specialists or social scientists.	Program staff may view RAP as a means of obtaining only positive evidence of program results for public relations purposes and will therefore tend to bias the study findings.	Train competent teams, including volunteer leaders, to implement RAP. Caution that RAP studies will lose credibility if audiences detect unacceptable biases. Emphasize the value of negative findings for making program improvements. Reward staff for basing program improvements on RAP studies.

Exhibit 3

Alternative Methods for Collecting Evidence on Program Results

Methods	Advantages	Limitations
Interviews: series of oral questions	personal contact	high cost per respondent
	flexible; permits follow-up questions	time consuming
Questionnaires: series of written questions answered and then returned through the mail	provides opportunity for expression without fear of embarrassment	inflexible; discourages follow-up questions
	low cost per respondent	low response rate
Expert Opinion: judgment based on people's experience and competence in a particular study	many tangible and intangible factors can be taken into account	human error and bias
		difficult to check information used to reach conclusions
Observation: organized surveillance and analysis of behavior	eyewitness account	human error and bias
	allows comparison of words and deeds	high cost; time consuming
Analysis of Documents: analysis of official papers that constitute the written records of extension program administration, including newspaper clippings, farm and home records, 4-H records, etc.	low cost	inapplicability of information
	source of background information	"selective survival" of documents

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Reflective Appraisal of Programs (RAP):

An Approach to Studying Clientele-Perceived Results of Cooperative Extension Programs

Guide .

by Claude F. Bennett*

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Contents

Preface

Reflective Appraisal of Programs (RAP) for studying results of extension programs is a simple and sufficiently valid method extension staff can use to document clientele-perceived results of a program. The method may be used without expending an undue amount of time in documenting such results.

This publication is intended to be an instructional guide for county extension staff who wish to use RAP to determine and appraise (evaluate) results of their programs. A companion publication in the "RAP package" presents the rationale for RAP and compares it with other approaches used to determine extension program results.

County extension staff often obtain clientele's immediate reactions to individual extension activities. These reactions help agents to gauge immediate results of events within a program and to plan subsequent events. This guide is based on the premise that county extension staff should also ascertain the longer-term results that occur over the months or years following a program. The audience for these findings will include extension agents, and also local, county, district, and state persons who influence or make decisions on program direction and resources.

This *guide* provides both the background concepts and *step-by-step instructions* extension agents need in order to determine program results. A *workbook* accompanies this guide as the final publication of the three-piece "RAP package." The *planning aids* in the workbook can help in choosing and recording specific plans for each step of a RAP study.

Extension agents have already used the RAP approach to study the results of these and other programs:[1]

- Swine disease control program
- Community recreation development program
- 4-H environmental education program
- Summer telephone advisory program on fruit and vegetable preservation
- Homemaker club program
- Integrated pest management program
- Consumer education program
- Teenage sex-education program
- 4-H home fire-prevention program
- Handicraft marketing program

RAP is based on a levels-of-evidence model for classifying the results of extension programs. These levels of evidence are fully described in the following sources: "Up the Hierarchy," *Journal of Extension*, March/April 1975; *Analyzing Impacts of Community Development*, Southern Rural Development Center, Mississippi State University, 1975; *Analyzing Impacts of Extension Program*, ESC 575, Extension Service, USDA, 1976 (reissued in 1979); *Teaching Materials on "Seven Levels of Evidence": A Guide for Extension Workers*, Supplement 1 to ESC 575, Science and Education Administration, USDA, August 1980.

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[1]The first county extension agent to complete a RAP study was Larry C. Ault of Richland County, Ohio. His study was entitled "Using Reflective Evidence of Farmers to Evaluate the Richland County Integrated Pest Management Program" (1980).

Acknowledgments

22

Step 1: Gauging Your Interest in the Results of Extension Programs

Who Needs What Evidence on the Results of Programs?

If you are like most extension staff, you have done a lot of work in the past year or two. You have probably held hundreds of meetings, answered many people's questions, and sent mailings by the thousands. You may have conducted TV or radio shows, also. But can you satisfactorily answer this double-barreled question: Who needs what evidence on the results of your programs? Are you and others getting enough evidence on the results of your programs, or is there evidence on the results of programs that you and others really need but do not have?

Do People Get Their Money's Worth?

Do you know enough about the results of people's involvement in extension activities to account adequately to others—county commissioners, extension advisory committees, your district director? They each have a responsibility to judge whether extension programs are worth their costs.

Are the Programs Worth the Effort?

Do you know enough about the results of people's participation in programs to answer this question: Is the payoff of the program worth my time and the time of people who work with me—paid staff and volunteers?

How Can Programs Be Improved If You Don't Know Their Results?

Finally, do you and others know enough about the results of your programs to see how to help people more effectively? In other words, do you know enough about the results of programs to see how to improve them?

Better information on the results of past programs can help you improve future extension programs—their objectives, methods, and financial support.

Many extension workers get bits and pieces of information (evidence) about the results of programs. In their attempts to combine these bits and pieces of information, they often end up creating program evaluation reports that are stranger than the proverbial camel: "a horse put together by a committee."

If you are interested in learning how to *systematically* document extension's effects on program participants, then this publication is meant for you. Read on and we will show you how to do just that.

Below is a shortened version of Planning Aid A. Planning aids are only referred to in this guide, not completely presented. Planning Aid A and the other planning aids—B through T—are fully presented in the accompanying RAP workbook. The planning aids are intended to help you choose options for implementing a RAP study, and to help you record these options. A completed workbook can serve as the outline for a brief written plan or proposal for a RAP study.

> Planning Aid A: Choose a program for a RAP study. (See page 1 of the RAP workbook.)

Step 2: Selecting a Program for a RAP Study

Three Factors to Consider Before Selecting a Program for Study

Before you can select a program for your RAP study, you must first evaluate which program has the highest priority for such a study. The three factors shown in Figure 1 should help you do this (based on Harry P. Hatry, Richard E. Winnie, and Donald M. Fisk, *Practical Program Evaluation for State and Local Government Officials*. Washington, D.C.: The Urban Institute, 1973, pp. 108-112.)

Figure 1

Use Three Factors to Help You Select a Program to Study

Factors

1. Need

2. Feasibility

3. Persuasiveness
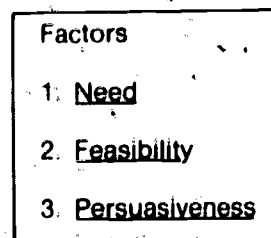
County Fair

Volunteer Leader Training

4-H Interest Groups

4-H Community Development

4-H Camping Programs

4-H TV

4-H Livestock Club Work
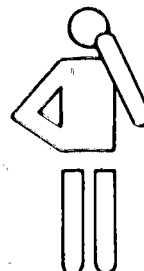
Factor 1: Which program is most in need of a study of its results? Have your supervisors or groups external to extension requested information regarding the results of specific programs? Evaluation studies are often mandated for pilot projects, new programs, and continuing programs as extension, its funding sources, or its clientele raise questions about the results of these programs. If you have been asked to account for the results of a particular program, the decision as to which program to select for a RAP study has been made for you.

If you have latitude regarding which program to evaluate, there are three aspects of "need" that you should consider. First, how certain are you and others about the effectiveness of each program? You are likely to feel less certain about the effectiveness of pilot or new programs, mass-media programs, or programs that have not been evaluated as recently as others. If the program is large or highly visible, the need for evaluation is heightened even further.

Second, how much will you and others gain if you can show that the program is working well? There might be an opportunity to increase the size of the program if you can document its results, or you might be able to increase the budget by producing such documentation. For example, the following types of programs have a high potential for increased or permanent funding if positive results can be demonstrated:

● Legislatively, administratively, or privately funded special projects

● Programs of high interest to legislative groups or the general public

● Programs with insufficient resources to permit participation by all who have expressed interest.

Third, how much risk are you and others taking if a program is not working well? For example, some programs may have declining participation or may require resources that seem too large for the apparent benefits. In other programs, participants could be harmed if they did not apply or if they misapplied information conveyed to them.

● Participants could be harmed handling dangerous chemicals while attempting to apply information conveyed by an extension program.

● Participants could be harmed if they had nutritional problems that were not taken into consideration during a program.

● Participants could be harmed if they misapplied food preservation techniques they were taught during a program.

● Participants could misapply crop production techniques promoted by a program.

Factor 2: Which program can be studied most feasibly? Some programs are more "evaluable" than others. Programs differ in their clarity of objectives. There may be financial barriers or political barriers to obtaining evidence on the results of some programs. The following specific questions should help you determine how convenient and practical it would be to evaluate the results of a program you are considering for a RAP study.

● Is it relatively easy to distinguish the program from other programs?

● Does the program lend itself to collection of data from clientele?

● Does the program have clear criteria by which it can be evaluated?

● Can the program be studied without disrupting it?

Factor 3: Which program is most likely to be modified if a study shows need for modification? How persuasive are your findings likely to be? For example, studies of program results will have more influence on decision makers if:

● vested interests in maintaining the program as it is are not as strong as they are in other programs.

● preconceptions regarding the program's effectiveness are not crystalized.

● the program and administrative staff have several options with regard to the program.

●, the program staff want to continue the program but have noticed problems in delivery or clientele response.

In addition to the considerations above, programs for RAP studies can be selected within the context of an established process such as constructing an annual plan of work, multi-year plans, county reviews, etc.

24

Step 3: Identifying Who Will Use and Implement the RAP Study

Producing a RAP study is one thing, but getting it accepted and used by others is quite another. Michael Patton, author of *Utilization-Focused Evaluation*, has commented: "You can lead a decision maker to information, but you can't make him swallow it."

What can you do to ensure that your study will influence people who can help you make needed program changes and supply program resources? To answer this question, let's first briefly review the reasons for obtaining systematic information on the results of extension programs.

1. To improve extension's programs

- by improving program staff decisions
- by improving council or program-building committee decisions
- by improving administrative decisions

2. To improve extension's accountability

- to county, state, federal, and private funding sources
- to the general public
- to extension and university administrators
- to lay committees and support groups

3. To improve understanding of and communication about extension programs

- by clarifying program objectives
- by analyzing and describing the costs, processes, and outcomes of programs

4. To improve morale

- of productive extension staff members
- of program participants who have made progress

Try to pinpoint the reasons different people or groups might have for studying a program's results. Who might use evidence on the results of programs, and how would they use it? For example, potential users of your RAP study might have the following types of decisions to make:

- whether to recommend or approve the same, more, fewer, or no resources for a program
- whether to revise the objectives of a program
- whether to modify the educational methodology and content of a program
- whether to modify the intended audience for a program
- whether to modify the delivery system of a program
- whether to alter how a program is managed by revamping its organizational structure and procedures

- whether to initiate or modify other programs, policies, and procedures related to the program being evaluated

Ensuring That Your Study Will Be Used

Generally, the way to ensure maximum use of any study is to anticipate who might have an interest in its findings and to involve these people in the design, implementation, and interpretation of the study.

Apply Seaman A. Knapp's maxim to get acceptance and use of your study.

"What a man hears
he may doubt;
What he sees
he may possibly doubt;
But what he does himself
he cannot doubt."

Seaman A. Knapp,
forerunner,
Cooperative Extension Service

Planning Aid B: Identify who might use the RAP study and for what purposes. (See page 2 of the RAP workbook.)

Recruiting a RAP Team

Remember, sharing responsibility for the purpose, method, and completion of your RAP study can increase its relevance, credibility, and usefulness. A team can also make the workload lighter and the job more enjoyable. Think seriously about who you would like to invite to work with you in designing, conducting, interpreting—and then, we hope, using—a RAP study.

Figure 2

Decide Who Should Be Involved in a RAP Study of Program Results

Persons or Groups Who Could Help with the Evaluation

1. District director

2. Program specialists

3. County director(s)

4. Extension agents (in own and other counties)

5. County councils or program-development committees

Planning Aid C: Indicate the individuals or groups you will invite to work with you. (See page 3 of the RAP workbook.)

Step 4: Defining the Scope of the Study

Distinguishing Between Implementation and Results

Objectives for extension programs exist at different levels (see Figure 3). The three lowest levels of objectives—the most immediate objectives for a program—concern implementation of the program. These levels are (1) extension staff invest a given amount of *inputs* (time and resources) in order to (2) conduct specified *activities* intended to obtain (3) *people involvement* in these activities. The levels of objectives concerning the results of the program include (4) participants' immediate *reactions* to program activities; (5) participants' *KASA* change—knowledge, attitude, skill, and aspiration changes; (6) their *practice change*; and (7) the *end results* that occur as a consequence of the KASA change and practice change.

Figure 3

Levels of Objectives in Extension Programs

```
7.  End Results
    6.  Practice Change
      5.  KASA Change
        4.  Reactions
          3.  People Involvement
            2.  Activities
              1.  Inputs
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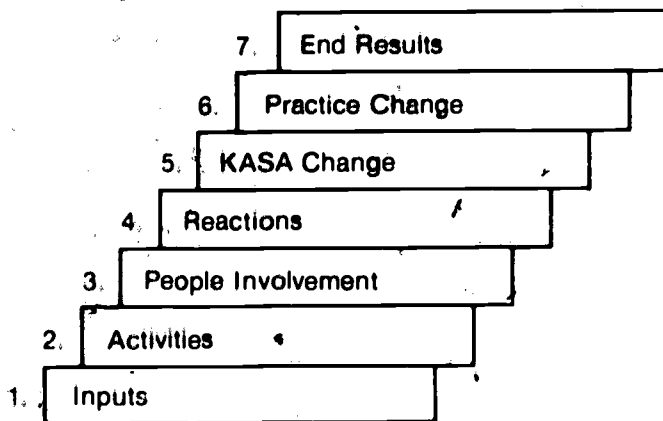
Selecting the Activities and Program Participants You Will Study

The next step is to identify the activities and program participants you will study. This will define the scope of the evaluation. The activities and people involved in the program should be defined as they relate to four traits: (1) the educational or delivery methods of the program; (2) the content of the program; (3) the audience for the program, and (4) the time period you will study (see Figure 4).

Methods. The RAP approach is not intended for study of the results of a single event or activity such as a workshop. Rather, RAP helps you to examine the results of a combination of several delivery methods such as TV shows, newsletters, and demonstrations.

In identifying the delivery methods that were used, be sure to include clientele-initiated activities. For example, did clientele tend to call or visit the office to request program-related information or advice? If they did, you should consider including these activities in the scope of your study. Planned or unplanned ways of responding to participants' requests for information or advice is the most important educational method in some extension programs.

Figure 4

Use Four Program Traits to Help Define the Scope of a RAP Study

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Program Traits

1. Methods

2. Content

3. Audience

4. Time Period
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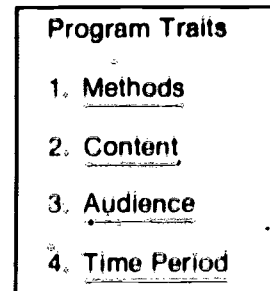
Consumer Economics Institute

Lectures by Resource People

Television Spot Announcements

Series of Newsletters on Money Management

Budget Workshop for Young Homemakers

2 6
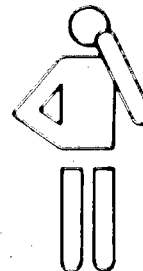
Content. The content or subject matter of a program includes (1) psychological, economic, and/or social processes, or (2) physical, chemical, and/or biological processes. Some extension programs focus exclusively on psychological, economic, and/or social processes, such as commodity marketing programs. Others focus exclusively on physical, chemical, and/or biological processes, such as some pest management programs. And some programs include information on both (1) and (2) above, such as farm and home development programs.

Audience. As you are defining the audience for your program, keep in mind that a program with two stages may also have two audiences. The following three examples illustrate this.

● Stage 1 of a program trains volunteer leaders of 4-H clubs and is followed by stage 2, in which leaders guide club programs with 4-H youth.

● Stage 1 is a demonstration for farmers where they try out a new practice. In stage 2, these farmers show neighboring farmers how the practice works.

● Stage 1 of a program helps community leaders organize task forces to address community problems. In stage 2, the task forces begin their work.

If you wish to evaluate the results of a program that has more than one stage, identify the scope of the first stage for one RAP study and the scope of the second stage for a separate, second RAP study. (You will need to complete two workbooks to do this.)

Time Period. People's memories tend to lapse increasingly as they are asked to recall events that took place a long time ago. For this reason, your study should evaluate only events that took place less than three years ago.

The scope of your study should be sufficiently general to be meaningful and important to the people who will potentially use it. In other words, it should:

● be applicable to the entire program or its principal parts

● deal with a number of activities

● deal with the main themes of the program.

At the same time, the study should not encompass such breadth that it becomes unmanageable. If too many audiences, subject matters, and methods are included in the scope of the study, it will become overly complex and unwieldy.

Involve the users of the study in making the important decisions on the scope of the RAP study.

Identifying the Results Expected from the Program

For the purposes of this guidebook, expected results are considered as they relate to the levels of reactions (to involvement in activities), KASA change, practice change, and end results.

Participants' reactions to program activities can be expected to vary depending on a combination of factors including the teaching methods (e.g., confrontational versus consensus-seeking) used in the program, the subject matter (e.g., innovative versus conventional wisdom) of the program; and the clarity of the audience's standards (e.g., precise versus diffuse).

Generally, you can expect that knowledge, attitudes, skills, and aspiration (KASA) changes will closely relate to the program's subject matters. Likewise, any practice changes can be expected to closely relate to the subject matters. For example, a program with subject matter on wood burning in home heating would be expected to change an audience's knowledge, attitudes, skills, intentions (aspirations), and practices regarding home heating.

End results that can be expected from KASA change and practice change relate less closely to the subject matters of the program. Expected end results of the program on using wood as a source of home heating may include, for example, increased comfort, savings in heating costs, and increased esteem in the community or neighborhood.

> Planning Aid D: Indicate the scope of the RAP study. (See page 3 of the workbook.)

Step 5: Identifying Interviewees

A RAP study will be meaningful only if its findings include data from a cross section of the participants in the program being evaluated. A return rate of only 20-30 percent is typical for mail questionnaires to most program audiences, and respondents tend to be those who are most positive toward the program and any who are extremely negative. We therefore recommend that you conduct telephone or personal interviews, in order to obtain responses from at least 75 percent of the program's participants.

How many participants should you seek to interview? The answer will depend partly upon how many people participated in the program within the time period covered by the study.

● If there were fewer than 40 program participants during the time period covered by the study, interview all the clientele the program reached during that period.

● If more than 40 people participated during the time period, randomly select participants from mailing lists, attendance lists, membership lists, etc.

Fortunately, interviews with 35-40 randomly selected participants yield information that is almost as accurate as that which would be obtained if all the participants were interviewed. If, however, you wish to obtain data on the results of the program as they are perceived by different groups, such as rural participants and urban participants, then you should interview 35-40 rural participants and 35-40 urban participants. Likewise, if you wish to see whether the results vary depending upon the delivery method that was used, interview 35-40 participants who were exposed to one method, 35-40 who were exposed to a second method, 35-40 who were exposed to both methods, and so on.

In addition, if the program includes more than one stage, such as a program to train community leaders who in turn lead committees working to improve various aspects of a community, you may elect to interview participants from each stage.

Ensuring That Your Sample Will Be Representative of the Participants

You can best prepare for a RAP study by keeping complete lists of the program participants while the program is being implemented. Using attendance lists, mailing lists, etc., compile a complete list of the program participants. Then follow these four steps to select a *random* sample.

1. Write in alphabetical order the names of the people who participated in the program during the specified time period and number this list. This list should include both participants who are still active and those who are inactive.

2. Write a number—1, 2, 3, 4, or 5—on each of five slips of paper so that no number is repeated and only one number appears on each slip. Place the five slips "in a hat" and draw one slip out.

3. Circle the number and the name on the list that correspond to the number on the slip you have just drawn. You have just selected your first interviewee.

4. Starting from the first name you have chosen, circle every second or third or fourth, etc., name after it so that 40 names are chosen. For example, if you have 120 names listed, you would choose every third name.

If you cannot compile a comprehensive list of participants, then use a more general list, such as an overall extension newsletter list, mailing list, or Agricultural Stabilization and Conservation Service county register. If you use such general listings, you will have to make more than 40 contacts to locate 40 people who participated in the program you are evaluating.

Modifying a Representative Sample

If you are interested in learning how a program affected certain subgroups of participants, then you might consider *purposeful* sampling. For example, suppose a program with 100 participants had 10 dropouts. A representative sample of 40 participants would, on the average, include 4 dropouts, too few dropouts to provide a reliable profile of all the dropouts. By interviewing all 10 dropouts, however, you could make general statements about this audience subgroup. Any discussion of the overall findings of the study should be based on data from the 4 randomly selected dropouts only.

> Planning Aid E: Indicate your plans for selecting interviewees. (See page 6 of the RAP workbook.)

Step 6: Preparing an Interview Instrument

One question that is often asked about a program's results is the extent to which they met program objectives. A program may or may not have objectives at each of the levels of reactions, KASA change, practice change, and end results. Even so, questions may be asked about the results of the program at these levels. For example, regardless of whether one of the objectives for your program was to increase participants' skills (level 5), you may need to answer questions regarding skill change.

Although program objectives are only one basis for questions regarding a program's results, you should try to include in your study those levels of evidence that correspond to a significant degree with your program's objectives.

Deciding Which Levels of Evidence to Study

Before deciding which of the seven levels to include in your study, briefly consider the kinds of questions users might ask regarding these seven levels.

Level 1—Inputs. What kinds of personnel and other resources, and how many, did extension expend on the program?

Level 2—Activities. What kinds of information and methods of delivery did extension use to interact with program participants?

Level 3—People Involvement. Who has participated in the program and how much? What have participants done in the learning situations provided by the program?

Level 4—Reactions. How much have program activities appealed to participants?

Level 5—Knowledge Change. How much have participants changed their awareness, understanding, and ability to solve problems?

Attitude Change. How much have participants' interests changed regarding the ideas or practices presented?

Skill Change. How much have participants changed in terms of their verbal or physical abilities?

Aspiration Change. How much have participants selected future courses of action or made decisions regarding future courses of action?

Level 6—Practice Change. How much have participants applied their KASA change to their personal and working lives? (KASA stands for knowledge, attitude, skills, and aspirations.)

Level 7—End Results. How much have participants and others been helped, hindered, or harmed by the results of changes in KASA and/or practices?

Be careful that you don't select too many levels of evidence or the study may become too time consuming and complex. In general, select for the study only the levels that are insisted upon by a majority of the study users. (Figure 5 shows a hypothetical example of levels selected for a RAP study.)

As the RAP team decides which levels of evidence to study, it should consider the following two factors.

● How many levels can adequately be covered during a brief interview.

● The amount of time that has elapsed since the program. Participants set aspirations (level 5), change their practices (level 6), and experience end results (level 7) over the weeks, months, and years following their involvement in a program. Thus, information on these levels of evidence can be obtained only after a significant portion of the participants have had the opportunity to apply KAS that they have acquired through the extension program.

> Planning Aid F: Indicate the levels of evidence that are most needed by the study users. (See page 6 of the workbook.)

Describing the Program

For the first part of the interview instrument, you will have to prepare a half-page summary of the program's activities (level 2) and the people who were involved (level 3) over the time period being studied. This summary is to be read to or by the interviewee as the interview begins in order to: refresh his or her memory of the program; open up communication between the interviewer and the interviewee; and provide a common point of departure for the balance of the interview.

Include "who, what, how, when, and where" as you prepare the description of the program's activities.

● WHO conducted the program— extension, other agencies, volunteer leaders, etc?

Figure 5
Select the Levels of Evidence Most Needed by the Users of the RAP Study

1.
2. Activities
3. People Involvement
4.
5. KASA Change
6. Practice Change
7.

29

- WHAT was the content or subject matter presented, discussed, etc.?

- HOW was the information communicated or delivered?

- WHEN did the program take place?

- WHERE did the meetings take place? Where was the source for broadcasts?

Include in your description of the people involved in the program:

- Who participated—characteristics such as age, sex, occupation, and perhaps socio-economic status

- How many participated—approximate numbers

- How often—an estimate of the frequency of clientele participation and the amount of time they expended in participation

- How intensely—as evidenced by participants' actions during learning situations.

> Planning Aid G: Indicate your sources for evidence to describe RAP levels 2 and 3. (See page 7 of the RAP workbook.)

Closed-End Items and Probe Questions

The RAP interview instrument is composed of both closed-end items and probe questions. Closed-end items, unlike probe questions, provide the interviewee with optional responses from which he or she chooses an answer. The interviewer then checks the response category that most nearly corresponds with the respondent's answer. If the interviewee does not wish to choose one of the standard responses and wants instead to give his or her own response, the interviewer checks "other" in the interview instrument and writes in the answer the interviewee provides.

We encourage you to follow up each closed-end item with a probe question. Probe questions help you define what an interviewee meant by a standard response— "to a fair extent," "to a slight extent," etc. Probes also help check the validity of an interviewee's responses in that inconsistencies can become apparent between responses to closed-end items and probe questions. Such inconsistencies should be taken into account when the RAP team interprets the pattern of responses to closed-end questions.

Probes can be used to follow up all the closed-end questions, regardless of the level of evidence the question relates to.

The following probe or nondirective questions can be used for any of the closed-end items:

- Could you please explain.

- Would you give me an example of what you mean.

Validation and People Involvement

As the interview begins, the brief summary of the program's activities and the people who were involved in the program "sets the stage" for the rest of the interview.

The interviewee reads, or the interviewer reads to him or her, the summary description of levels 2 and 3. The respondent then is asked to "validate" the description and then to describe the extent to which he or she participated in the program's activities. You may want to use a standardized validation question or "item" to determine whether the respondent agrees with your description of the program.

The following is a suggested validation item.

Say to the interviewee:
Is this account of the (name of program)

_____ accurate as far as you know
_____ reasonably accurate
_____ not accurate
_____ don't know/don't recall
_____ other (specify) _____

The validation item confirms whether you have described the activities and the people involved in them accurately as the interviewee sees it. This confirmation ensures that you and the interviewee are in fact talking about the same program and defining it similarly.

You may want to use the following suggested item to determine the respondent's degree of participation in the program.

Say to the interviewee:
To what extent did you participate in/read or view (activity 1)?

_____ to a great extent
_____ to a fair extent
_____ to a slight extent
_____ not at all
_____ don't know/don't recall
_____ other (specify) _____

To what extent did you participate in/read or view (activity 2)?
(Use the same response scale as above.)

The items above identify any participants who believe they have not been in contact with the particular program you are studying and who therefore should not be interviewed further.

The following item can be used for parents of 4-H youth to determine their children's extent of participation.

Say to the interviewee:
To what extent did your son/daughter participate in/read or view (activity 1, 2, or 3)?
(Use the same response scale as above.)

> Planning Aid H: Indicate what aspects of RAP levels 2 and 3 your interview will include. (See page 7 of the workbook.)

The next step in constructing the interview instrument is to select or adapt RAP's standardized interview questions regarding levels of evidence on program results.

30

Reaction Items

Use or adapt the interview questions below if you plan to obtain evidence on participants' reactions to the program. Refer to Planning Aid D as you "plug" an activity or activities into a prestated interview question,

Say to the interviewee:
To what extent did (activity 1, 2, and/or 3) meet your expectations at the time?

_____ to a great extent
_____ to a fair extent
_____ to a slight extent
_____ not at all
_____ don't know/don't recall
_____ other (specify) _____

If the interviewee answers "to a slight extent" or "not at all," say:
Could you please explain.
Interviewee's explanation: _____

_____

There are two approaches that can be used to prepare reaction items:

1. You can prepare separate reaction items for each activity, one for activity 1, one for activity 2, etc.

OR

2. You can include two or more activities in one reaction item.

You may wish to clarify the interview question on reactions as follows:

To what extent did (method 1, 2, and/or 3) on (subject 1, 2, and/or 3) meet your expectations at the time?
(Use the same response scale as above.)

An example of a reaction item for an interviewee who is an *observer* rather than a program participant might be as follows:

Would you say that (activity 1, 2, and/or 3) met your son's/daughter's expectations at the time?
(Use the same response scale as above.)

If you are eliciting reactions to several activities, you might consider listing the activities on the left of the interview instrument and the response categories across the page, and then checking the appropriate corresponding response.

> Planning Aid I: Indicate any aspects of REAC-
> TIONS that the interview will cover. (See page 8
> of the workbook.)

KASA Change Items

If you selected KASA change as a level of evidence on which to obtain information, use or adapt the items below for the interview instrument. Again, refer to Planning Aid D.

Knowledge Change Items

Say to the interviewee:
Think back to the activities in which you were involved. To what extent did you learn more about (subject 1, 2, and/or 3)?

_____ to a great extent
_____ to a fair extent
_____ to a slight extent
_____ not at all
_____ don't know/don't recall
_____ other (specify) _____
("Other" here allows for any negative replies, such as: "I received mostly misinformation.")

If the respondent gives any of the first three responses or another applicable response, say:
Could you give me an example.
Respondent's answer: _____

_____

You can vary the scope of the item(s) by using the options discussed in the section on reaction items:

• Preparing separate items for each subject or content area covered in the program.

• Including two or three closely related content areas in one item.

Remember, the subject or content areas covered in KASA change and practice change items can refer to a psychological or social process as well as a physical or biological subject.

The above options for knowledge change items apply to all of the RAP items that follow, but for the sake of brevity they will not be repeated.

The following is an example of a knowledge change item for an interviewee who is or was an observer rather than a participant. (This optional type of item will not be repeated, although it, too, is applicable to levels of evidence 5, 6, and 7.)

Say to the interviewee:
Think back to all the activities in which your daughter/ son was involved. To what extent did he/she learn more about (subject 1, 2, and/or 3)?
(Use the response scale and follow-up items above.)

You might also consider using the following item to detect the extent to which participants became more certain that what they already knew about a subject covered in the program was correct.

Say to the interviewee:
To what extent did your involvement make you certain that what you already knew about (subject 1, 2, and/or 3) was correct?
(Use the previous response scale and follow-up items where applicable.)

Attitude Change Items

Say to the interviewee:
To what extent did you become more interested in (subject 1, 2, and/or 3)?

_____ to a great extent
_____ to a fair extent
_____ to a slight extent
_____ not at all
_____ don't know/don't recall
_____ other (specify) _____

Would you explain briefly what you mean.
(An interviewee who responded "not at all" might explain: "I could not become any more interested because I already was extremely interested.")
The expression "to what extent did you become more interested in," in the above item, could apply, for example, to a public policy education program to increase citizen awareness, interest in, and inclination to vote on a referendum.
An alternate expression for detecting attitude change could be:
To what extent did you become more favorable toward (subject 1, 2, and/or 3)?
(Use the same response scale and follow-up item as above.)
This alternative expression, "more *favorable* toward," could be used for participants in an inducement, advisory, or advocacy-type extension program, such as a program designed to persuade families to use fluoridated toothpaste in an area in which there is no fluorine in the drinking water.

Skill Change Items

Say to the interviewee:
To what extent did you acquire more skill in (subject 1, 2, and/or 3)?

_____ to a great extent
_____ to a fair extent
_____ to a slight extent
_____ not at all
_____ don't know/don't recall
_____ other (specify) _____
(An "other" response could be: "I acquired a lot of skills that I've never really needed.")

If the interviewee selects one of the first three categories, say:
Could you give me an example or two.

Aspiration Change Items

Say to the interviewee:
To what extent did you become more determined to try out (subject 1, 2, and/or 3)?

_____ to a great extent
_____ to a fair extent
_____ to a slight extent
_____ not at all
_____ don't know/don't recall
_____ other (specify) _____
(An "other" response could be: "I became less determined because I saw that the idea does not apply to me.")

If the interviewee selects one of the first three categories, say:
Would you mind giving me an example of what you mean.
The expression "to what extent are you more determined to try out," in the above item, pertains to kinds of actions that the interviewee has not engaged in previously (e.g., use of a home computer).

An alternate expression for an item on aspiration change could be:
To what extent did you become more determined to try out ideas on (subject 1, 2, and/or 3)?
(Use the same response scale and follow-up item as above.)
This alternate expression, "try out ideas on," is particularly appropriate for action that the participant has already engaged in but in a different way than recommended or offered by the program.

Planning Aid J: Indicate any aspects of KASA CHANGE that the interview will cover. (See page 9 of the workbook.)

Practice Change Items

If you selected practice change as a level of evidence on which you will obtain information, and if the interviewee indicates any increase in KASA change, use or adapt the items below. (Refer to Planning Aid D for the subjects to plug in to the standardized items.)

Say to the interviewee:
To what extent have you put to use the ideas or skills you learned regarding (subject 1, 2, and/or 3)?

_____ to a great extent
_____ to a fair extent
_____ to a slight extent
_____ not at all
_____ don't know/don't recall
_____ other (specify) _____
("Other" responses to the question above or to a probe question could include: "I don't have the money to put these ideas into practice"; "I haven't yet had the opportunity to use these ideas or skills.")

32

Regardless of the response category chosen by the interviewee (except for "don't know/don't recall"), say:
Would you please elaborate or explain.

An alternative or supplementary item on practice change might ask:
To what extent have you shared with others the ideas or skills regarding (subject 1, 2, and/or 3)?
(Use the same response scale and follow-up items as above.)

So far we have suggested using nondirective probe questions to follow the closed-end items. A directive probe could obtain even more specific information on the frequency and variety of use of content presented in the program. Here are two examples of directive probes.

(a) Would you explain what you had in mind in giving your answer. For example, how often during the past (time period) have you/your son/daughter used the skills or ideas regarding (content 1)?

(b) Please provide an example or two—for instance, you/your son's/daughter's use of the ideas or skills regarding (content 2) at school, in community activities, or in jobs.

> Planning Aid K: Indicate any aspects of PRACTICE CHANGE that the interview will cover. (See page 9 of the workbook.)

End Results Items

Use the items below or modify them as needed if you plan to obtain evidence on end results. To use end result items, interviewees must have indicated some degree of KASA and/or (preferably) practice change. Refer to Planning Aid D.

Say to the interviewee:
You indicated that you have made use of the ideas or skills regarding (subject 1, 2, and/or 3). Overall, how helpful have the results been?

_____ ver helpful
_____ fairly helpful
_____ slightly helpful
_____ no help at all
_____ harmful
_____ don't know/don't recall
_____ other (specify) _____
(Interviewee's "other" response or response to the probe item might be: "It's too early to tell what the results will be"; "I haven't made up my mind whether the results are, on balance, a help or a hindrance"; "I received some financial benefit"; "What we did has helped some members of the community but has had an unfavorable impact on others.")

Regardless of the response category chosen by the interviewee (except for "don't know/don't recall"), say:
Would you please explain or give me an example or two.

The closed-end item suggested above can be made more specific by plugging in various types of expected end results into an alternate expression of the item, such as:
You indicated that you have made use of the ideas or skills regarding (subject 1, 2, and/or 3). How helpful have the results been in terms of (expected end result 1, expected end result 2, and/or expected end result 3)?
(Use the same response scale and follow-up item as above.)

Again, use nondirective probes to help you obtain the interviewee's explanation for his/her selection of one of the optional responses.

A directive probe can help obtain more specific kinds of explanations or examples regarding perceived end results. An example of a directive probe on the financial results of a practice change is:
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 1, 2, and/or 3)?

Develop your own meaningful response categories (i.e., more than $2,000 lost; less than $2,000 lost; no losses, savings, or gains; less than $2,000 gained or saved; from $2,000 to $4,000 saved or gained, etc.).

> Planning Aid L: Indicate any aspects of END RESULTS that the interview will cover. (See page 9 of the workbook.)

Other Items and Procedures

Although more time consuming and difficult to use than the type of reflective items above, other approaches can obtain more detailed evidence of perceived program results. You may wish to consider the approach of constructing lists of specific, possible program results and asking respondents to indicate which of these results apply to themselves. Also, you may wish to include several other items in the interview, such as the following open-ended question:

What suggestions do you have for improving the program?

Estimating Input

If level 1 was chosen for the purpose of studying the cost to extension of offering the program, first determine the total number of staff days expended on the program, within the time period covered by the study, for the staff from the county, area, district, and state levels. Then multiply the number of extension staff days expended by the average daily cost for each position. This will allow you to calculate the total estimated cost of the program. (Your state extension fiscal office should be able to supply you with the average daily cost for positions at the county, area, district, and state levels.)

You may wish to include volunteer time expenditures, also. To do this, calculate the dollar cost of the program had volunteers been paid employees. This figure will represent the degree of savings gained through reliance on volunteer staff.

Biographical Data

It is usually helpful to gather background data (biographs) during the interview. This assists in describing the interviewees as a whole and in analyzing the impact of the program on different types of participants.

The following information should generally be included in the biograph:

● The participant's approximate age (i.e., 20-30, 30-40, etc.)

● How much formal education the participant has had

● The participant's sex

You might also ask respondents for this information:

● Occupation

● Residence (city, suburb, town, rural community, farm)

● Race

● Family status

● Other items as necessary

Field-Testing the Interview Instrument

The interview instrument should be field-tested with two or three program participants. Test and modify the interview questions as necessary to ensure that:

● The evidence the users need is obtained.

● Each item elicits accurate and complete information.

● The interview is brief enough and interesting, as judged by the interviewees.

> Planning Aid M: Indicate any additional items or procedures that will be included in the RAP interview study. (See page 10 of the workbook.)

3

Step 7: Interviewing Program Participants

Selecting Interviewers

The next step of your RAP study involves planning who will do the interviewing and deciding how much training they will need. Interviewers may need to be trained to ensure that they each get equally accurate and complete information. At the very least, all the interviewers should assemble to discuss the procedures for the interview and each of its questions.

As you choose your team of interviewers, consider the following:

● Will the interview data be more credible to users of the study if the interviewers are "nonproviders" (not responsible for conducting the program)?

● How many nonproviders are available to help conduct interviews?

● How many "providers" are available to conduct interviews?

● How much training will the interviewers (nonproviders and providers) need?

One of the most important considerations in selecting an interviewer is whether the person has the confidence needed to contact people and pose questions to them. Having this confidence depends partly on whether the person feels it is appropriate to ask program participants to provide interviews.

Once you have selected a set of interviewers, assign them to the interviewees in a way that will minimize bias. You might consider doing this randomly.

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Planning Aid N: Indicate who will do the RAP
interviewing. (See page 11 of the workbook.)
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Training the Interviewers

The interviewers must be able to establish rapport with the person they are interviewing, but at the same time must remain neutral. The interviewer must not act more favorably toward the interviewee if he or she says favorable things about the program's results. Likewise, the interviewer must not act shocked, angered, saddened, or embarrassed if unfavorable results are reported. (For further information on this, see Michael Quinn Patton's *Qualitative Evaluation Methods*. Beverly Hills. Calif.: Sage Publications, 1980.)

Make sure that interviewers are willing and able to take each respondent through the prescribed sequence of questions, asking each question as it is written. Interviewers should practice by interviewing each other. Practice should be by telephone if the survey is to be done by telephone.

The following three steps "set the stage" for the interview. Have interviewers practice beginning the interview as follows:

1. Interviewer introduces himself/herself in an appealing way.

2. Interviewer explains why the survey is being conducted. The interviewer could say: "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."

3. Make the interviewee feel secure. The interviewer might say: "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 any questions before we begin?"

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Planning Aid O: Indicate who will train inter-
viewers and test the interviewing procedures.
(See page 11 of the workbook.)
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Deciding on Face-to-Face or Telephone Interviewing

Telephone interviewing is much more economical than face-to-face interviewing and usually is satisfactory for brief, standardized/open-ended interviews. Face-to-face interviewing provides more opportunity to establish rapport and communication through facial cues, etc., but telephone interviewing also has several advantages.

1. It requires less of a time commitment from the interviewer and the interviewee.

2. It is convenient for the interviewee.

3. Sometimes the interviewee feels more free to express his or her opinions or report behavior.

Face-to-face interviews may be necessary with low-income program participants, many of whom do not have telephones.

Suggestions for Telephone Interviews

1. Try to contact the interviewees by mail to prepare them for the telephone calls. Perhaps the chairperson of the county program planning committee could write a letter indicating the purpose of the interview, the approximate time of the call, and how long the interview will take.

2. Consider sending a copy of the interview questionnaire to the respondents to prepare them for the interview. If this is not advisable, expect to repeat some questions during the interview.

3. Because the voice is more important in telephone communication than in face-to-face communication, voice modulation, diction, and appropriate pauses must be emphasized.

4. Most of the interviews can be done in the evening, but interviewers should not be intrusive and should offer to call back at a more convenient time if necessary. Two interviews per evening is a realistic target for most interviewers.

Answers to the probe questions may be difficult to summarize unless you use a technique *during the interview* to classify answers. Consider precoding the subjects and the expected types of responses to probe questions. For example, precoded categories for probes regarding changing practices in family resource management could include:

Subject 1—Long-range planning for family finances

1a—Made plans for financing children's college education

1b—Made plans for retirement

1c—Made plans for estate management

As interviewees respond to probe questions, tally their responses, to the extent possible, according to the code you have developed (see Figure 6).

It is not only the frequency of different types of responses to probes that is important. Some comments and suggestions express extraordinary insights or typify the results for various participants especially well. Recording these comments or suggestions verbatim can greatly enhance the quality and liveliness of the interview findings (see Figure 6).

> Planning Aid P: Indicate plans for interviewing procedures. (See page 12 of the workbook.)

Step 8: Analyzing, Drawing Conclusions and Evaluating, and Making Recommendations

Analyzing

To obtain a numerical profile of clientele-perceived results of the program, you should count and record the number of interviewee responses in each response category of each item.

Explore whether you can get the interview data computer analyzed through the state extension office or through a county extension office computer or computer terminal. If you have fewer than 15 completed interviews, it may be simpler to analyze the data with tabulation forms and a hand calculator.

Tallies of the responses to the closed-end items will provide answers to questions such as: To what extent did the program's activities meet clientele's expectations? To what extent did clientele receive benefits or harm from KASA change or practice change? Consider converting tallies to percentages and bar charts. This will present the results of the program in a graphic, easy-to-understand way.

You may wish to find out under what *conditions* the program had the most favorable results and the least favorable. This will help you and others modify the program so that its overall effectiveness will be enhanced. For example, suppose interviewees who were involved in a program's demonstration activities indicated practice change and beneficial end results—two objectives of the program—but that those who were exposed only to other delivery methods of the program reported no such change or benefits. Such a finding might lead the RAP team to recommend emphasizing the demonstration method of delivery or recruitment of participants who would be receptive to demonstrations.

Interviewee-reported program results can be analyzed according to:

● The characteristics of the participants— age, income, residence, size of farm operation, etc.

● The delivery method or type(s) of activities that participants were exposed to

● The subject matter that participants were introduced to.

Consider presenting survey findings along the lines shown in the figure on page 17. Interviewees' "other" responses and responses to nondirective and directive probes should supplement and complement the analysis of the responses to the closed-end items. Use illustrative verbatim replies along with numerical profiles to present an overall picture of the frequency of similar kinds of responses.

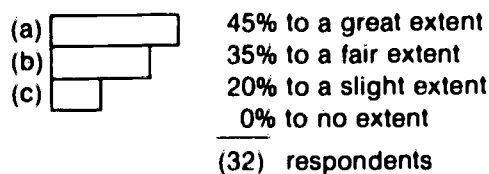> Planning Aid Q: Indicate plans for analysis. (See page 12 of the workbook.)

36

Figure 6

Participants' Ratings of Their
Program-Induced Improvement
of Skills in Weed Control
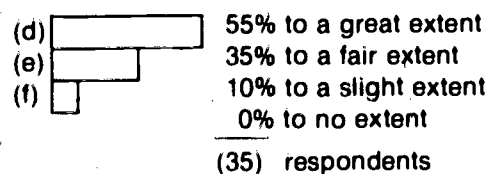
Present RAP Findings as in This Hypothetical Example

Size of
participant's farm   Degree of Improvement in Weed Control Skills

500 acres or more

(a) 45% to a great extent
(b) 35% to a fair extent
(c) 20% to a slight extent
    0% to no extent
    (32) respondents

Less than 500 acres

(d) 55% to a great extent
(e) 35% to a fair extent
(f) 10% to a slight extent
    0% to no extent
    (35) respondents

Examples of Illustrative and Verbatim Comments of
Interviewees, Relative to Response Categories

Response category (a), larger farms
●Learned how to calibrate herbicide sprayer
 (5 respondents)
 Verbatim comment from 1 respondent: "Through
 extension's conservation tillage program, I received
 hands-on training in calibrating an herbicide sprayer."

●Learned how to identify noxious weeds (5 respondents)
 Verbatim comments from 2 respondents: "As a result of
 an extension workshop, I learned how to control
 multiflora rose in my pastures"; "I decided that
 extension's recommendations on chemical control of
 weeds are not as complicated as I thought they'd be."

●No response to probe (4 respondents)

Response category (b), larger farms, etc.

37

Drawing Conclusions and Evaluating

The study's numerical findings—the percentages of respondents who answered the items in certain ways—should be converted to narrative findings. Narrative findings that could be based on the figure on page 17 are as follows: All the participants interviewed perceived that they had gained at least some skill in weed control through their participation. About half the participants felt that they had made gains in weed control "to a great extent" rather than to a "fair" or "slight" extent, and those with smaller farms perceived greater gains than those with larger farms.

To draw conclusions about the program's results requires interpreting study findings: findings have little meaning of their own. Insofar as the principal users of the study are going to eventually make decisions based on the findings, they should be encouraged to apply their particular perspective to drawing conclusions from the study's findings. We therefore recommend that the entire RAP team or a committee of the team inspect and interpret the findings. This group can examine the tables or charts, draw conclusions about the results of the program, and summarize these conclusions.

In stating conclusions, it is probably wise not to attribute full credit for the practice changes and end results reported by interviewees to the KASA change that interviewees gained through program participation. In most programs, factors unrelated to the extension program have also influenced the participants. Most practice changes and end results of extension programs are affected by such diverse influences as the weather, other sources of information, financial resources of the program participants, and their motivations. It may be judicious, therefore, to state that "the (name of the program) helped (proportion of the audience) to (change given practices with particular end results)."

Conclusions about a program's results should be general statements about the results. Evaluations should be appraisals or judgments about how adequate or successful these results are. To judge a program's success or failure in terms of its results requires that the results be compared with established goals or standards. Evaluation always demands an answer to the question "Success or failure as compared with what?" Thus, we suggest that the actual pattern of RAP findings be compared with an expected pattern. Furthermore, unless these expected findings are agreed upon before the

survey is conducted, the team may be unable to agree on an evaluation of the program's results. For this reason, we recommend that the RAP team (e.g., volunteer leaders, district agent, and others) join you, before the interviews are conducted, in specifying what findings would indicate that a program was "successful," successful, that is, in terms of interviewees' estimate of the results.

The procedure of specifying the expected pattern of RAP findings will establish "exact objectives" against which participants' reflective evidence can be compared. The percentage of interviewees who are expected to select given responses can then be compared with the actual percentage selecting these responses, thus determining the degree to which program results are judged to be adequate. For example, suppose a RAP team set the following criterion relative to the findings presented in Figure 6: At least two-thirds of the interviewees should indicate that they gained skills in weed control "to a fair extent" or "to a great extent." Since over 80 percent of the interviewees stated that they acquired weed control skills "to a fair extent" or "to a great extent," the program could be judged to be quite successful as far as improvement in skills is concerned.

> Planning Aid R: Indicate procedures for drawing conclusions and evaluating the program's results. (See page 12 of the workbook.)

Making Recommendations

To make recommendations regarding future programs, the study's conclusions and evaluation as well as informal evidence must be taken into account. Thus, the evaluation of a program's results based on reflective evidence has no automatic relationship to recommendations for future program funding or operation. For example, you may recommend continuing an ineffective program long enough to find out whether certain modifications will work adequately.

Before you recommend how a program can be improved, you should do the following.

1. Determine the effectiveness of the program at different levels (e.g., practice change) by comparing the actual and the expected program results.

2. Select the level or levels that appear most in need of improvement.

3. Suggest how to produce needed improvements.

Program results at the higher levels are brought about partly by results at the levels below them. For example,

changes in practices are assisted by a significant degree of KASA change. Thus, if objectives for end results and/or practice change are not met and those for KASA change are met, it may be necessary to either revise the objectives for KASA change or find out what barriers are preventing participants from applying their acquired knowledge, attitudes, skills, and aspirations. This may mean deciding whether to initiate or recommend other types of programs, policies, and procedures related to the program.

If KASA change is found to be inadequate by program participants, the RAP team should consider:

- whether to modify the educational methodology and/or the content of the program or both

- whether to modify the intended audience or audiences for the program

- whether to modify the delivery system of the program internally or in relation to other organizations

- whether to alter the way in which the program is managed (organizational structure and procedures)

- whether to modify the program staff

Consider alternative plans for improving the program and then recommend which of these alternatives should be adopted. If it is not possible to make specific recommendations, state the issues, alternatives, or implications that should be considered.

Recommendations of the type mentioned above relate to level 1 of the levels-of-evidence model; changes recommended for levels 2 through 7 raise the question of whether to approve the same, more, or fewer resources for the program. The question of the amount of resources to recommend for the program will exist, of course, regardless of the degree of success ascribed to the program by the RAP study. A successful program may thus be expanded if the need for the program still exists or increases. Likewise, extension may decide that it should try harder (allocate more resources) to improve a program judged not yet successful in terms of its results. On the other hand, a successful program may receive fewer resources because the program's very success makes its continuation less necessary. Also, the lack of success of a program may suggest that resources should be used more effectively in some other way.

> Planning Aid S: Indicate plans for helping decision makers to use the RAP study. (See page 13 of the workbook.)

Step 9: Communicating the RAP Study

Study findings, conclusions, appraisals, and recommendations should be shared with decision makers in a way that will facilitate their decision making.

Generally, there are two audiences for your findings, conclusions, and recommendations—stakeholders and the general audience. Stakeholders are those people who helped plan and conduct the study in order to obtain answers to their own questions. In the general audience are those people who became aware of the study and its findings only after it was under way or complete.

With both of these groups your objective will be the same: to encourage them to understand and use the study. The strategies for reaching these two groups and meeting your objective will, however, be different. Your final reporting strategies for stakeholders may be *less* important, since they will know about and begin to use the study's findings before the final report is completed. Nonetheless, you should explore with the stakeholders how the report should be packaged and presented so that it will be of the greatest help to them.

How to best share your findings, conclusions, and recommendations with general audiences or nonsponsors of the study (e.g., agricultural agency officers, bankers, clergy, local business people) will require insight into their responsibilities, interests, and capacity to apply the study to decision making.

Try to direct specific findings, interpretations, and recommendations to individuals who need such specific evidence. Bear in mind that different findings are likely to be of interest to different individuals and groups.

> Planning Aid T: Indicate plans for communicating the RAP study. (See page 13 of the workbook.)

39

Additional copies of the RAP package may be ordered
for $2.00 (New York State residents) or $2.50 (out-of-
state residents) plus postage and handling. Minimum
order: $10.00. Address all inquiries to:

Media Services
B-10 Renssalaer Hall
Cornell University
Ithaca, NY 14853
Tel.: (607) 256-3157

Workbook

for Planning a Study of the Clientele-Perceived Results of the

Cooperative Extension Program

in County/Area

Using Reflective Appraisal of Programs (RAP)

Completed by:

(Extension Agent)

and

(RAP Team Secretary)

by Claude F. Bennett*

*Program Analyst. Program Development. Evaluation and Management Systems, Extension Service, U.S. Department of Agriculture. Washington, D.C

Contents

Planning Aid A: Choose a program for a RAP
study.

Choose a program for a RAP study and jot down key words to describe the program
according to the points below. These key words will help you write a more complete description
of the program later.

Name or title of the program.

_____

_____

Situation in the county, area, state, and/or nation that led to the development of the program,
including needs, problems, opportunities, and capabilities.

_____

_____

_____

_____

_____

Program's objectives—immediate, intermediate, and long-range.

_____

_____

_____

_____

_____

Strategy, resources, activities, methods, and subject matter(s) of the program.

_____

_____

_____

_____

_____

43

1

Extension personnel and volunteers responsible for the program.

_____

_____

_____

_____

Other appropriate information about the program.

_____

_____

_____

_____

> **Planning Aid B:** Identify who might use the RAP study and for what purposes.

Check (✓) the boxes that represent who might use the RAP study and for which purposes.
(Check as many boxes as apply to the study.)

Potential Users	Potential Purposes				
	To Improve Decisions on Programs or Program Resources	To Improve Accountability Within Extension	To Improve Extension's Accountability Externally	To Improve Morale	To Improve Understanding of Programs
You/Other County or Area Agents					
Your Supervisor (District or Area)					
Your Program Development Committee					
Your County Legislators, County Court, or County Commissioners					
Your State Legislator					
Your State Specialist or Program Director					
Program Clientele					
Others: _____					

Check the individuals or groups you will invite to work with you in planning, conducting, and/or interpreting the RAP study.

_____ Council or program development committee(s)
_____ Other extension agents
_____ Program or subject-matter specialist(s)
_____ Evaluation specialist
_____ District or regional director
_____ State/district program leader
_____ Other (specify) _____

List the activities, audience, methods, content, and time period that the RAP team will study. List also the types of reactions, KASA changes, practice changes, and end results that you will look for. (Fill in only those items that apply to the study.)

Activities or types of activities you will study.

1. _____

2. _____

3. _____

4. _____

Audience(s) you will study. If you are studying more than one program stage, complete a separate workbook for the audience of each stage.

1. _____

2. _____

Methods you will study (the major delivery modes of the program).

1. _____

2. _____

3. _____

4. _____

Subjects or program content you will study (subjects can be biological, physical, economic, psychological, and/or social processes).

1. _____

2. _____

3. _____

4. _____

Time period of the program you will study—weeks, months, years (up to three).

_____

Reactions you expect to the program activities (how positive and/or negative).

_____

_____

Knowledge changes you will look for in terms of subjects (relative to the subjects you listed above).

1. _____

2. _____

3. _____

4. _____

Attitude changes you will look for in terms of subjects (relative to the subjects you listed above).

1. _____

2. _____

3. _____

4 _____

46

Skill changes you will look for in terms of subjects (relative to the subjects you listed above).

1. _____

2. _____

3. _____

4. _____

Aspiration changes you will look for in terms of subjects (relative to the subjects you listed above).

1. _____

2. _____

3. _____

4. _____

Practice changes you will look for in terms of subjects (relative to the subjects you listed above).

1. _____

2. _____

3. _____

4. _____

End results, i.e., consequences of KASA change and/or practice change, you will look for.

1. _____

2. _____

3. _____

4. _____

47

Planning Aid E: Indicate plans for selecting interviewees.

Check the lists you plan to use to enumerate program participants and whether you will draw a sample of interviewees. Indicate the intended number of interviewees.

_____ Attendance lists
_____ Mailing list(s)
_____ Membership or enrollment lists
_____ List(s) of people who telephoned or wrote for advice.
_____ Other (specify) _____

Based on the estimated total number of participants involved during the time period being studied, i.e., _____ , it will probably be necessary to:

_____ interview all the participants
_____ interview a random sample of _____ participants
_____ interview a purposeful sample of _____ participants
The total number of interviewees is expected to be _____.

Planning Aid F: Indicate the levels of evidence that are most needed by the study users.

In the column at the left below, fill in the names or titles of people who will be users of the RAP study. Then check the levels of evidence that these people need. (Levels 2 and 3 are included in every RAP study.) Don't assume what evidence these people need. Rather, find out which of the levels each user needs for understanding the program, decision making, accountability, and/or morale. Before you check the levels of evidence each person needs, find out whether this person already has sufficient or easy access to this evidence without a RAP study. If the answer is no, then you should check the box corresponding to that level of evidence.

Which Levels of Evidence Are Needed by Whom?								
Who Needs the Evidence?		1. Inputs	2. Activities	3. People Involvement	4. Reactions	5. KASA Change	6. Practice Change	7. End Results

(Courtesy of Arlen Davison, Cooperative Extension Service Washington State University)

What sources of evidence (to which you have easy access) can you depend upon to provide
you with the information to describe accurately levels 2 and 3 (activities and people
involvement) of the program? Check as many boxes as necessary.

Levels of Evidence	Sources of Evidence			
	Extension Organization		Self	
	Personnel	Records	Memory	Files
(2) Activities				
(3) People Involvement				

Check the items below regarding levels 2 and 3 that you will include in the RAP interview
instrument.

_____ A "validation item"
_____ Respondent's reflection on his or her degree of participation
_____ Parent's or other person's estimate of the respondent's degree of participation
_____ A nondirective probe (open-ended) item

The items regarding degree of participation in the program will cover these activities or types
of activities (should be the same as in Planning Aid D).

1. _____

2. _____

3. _____

4. _____

> **Planning Aid I:** Indicate any aspects of
> REACTIONS that the interview will cover.

Check those aspects of reactions, if any, that the interview will cover.

_____ Respondent's reflection of reaction

_____ Parent's or other person's estimate of participant's reaction

_____ Nondirective probe (open-ended) item

The interview items on reactions will cover these activities or types of activities (will normally be the same as in Planning Aids D and H).

1. _____

2. _____

3. _____

4. _____

OR

The items on reactions will cover these educational methods or delivery modes (same as in Planning Aid D).

1. _____

2. _____

3. _____

4. _____

AND

These subject matters (same as in Planning Aid D).

1. _____

2. _____

3. _____

4. _____

5υ

Check those aspects of KASA change, if any, that the interview will cover.

	Knowledge	Attitude	Skill	Aspiration
Respondent's reflection of change	_____	_____	_____	_____
Parent's or other person's estimate of participant's change	_____	_____	_____	_____
Nondirective probe (open-ended) item	_____	_____	_____	_____

KASA change interview items, if any, will cover these subject-matter/content areas (same as in Planning Aid D).

1. _____

2. _____

3. _____

4. _____

Check those aspects of practice change, if any, that the interview will cover.

_____ Respondent's reflection of change
_____ Parent's or other person's estimate of participant's change
_____ Nondirective probe
_____ Directive probe(s)

Practice change interview items, if any, will cover these subject-matter/content areas (same as in Planning Aid D).

1. _____

2. _____

3. _____

4. _____

Check those aspects of end results, if any, that the interview will cover.

_____ Respondent's reflection of end results that were a consequence of program-induced
KASA change/practice change
_____ Parent's or other person's estimate of end results that were a consequence of
program-induced KASA change/practice change
_____ Nondirective probe
_____ Directive probe(s)

The interview items regarding end results will refer to consequences of these
subject/content/practice change areas (same as Planning Aid D).

1. _____

2. _____

3. _____

4. _____

The interview items on end results will cover the following expected consequences of KASA
change and/or practice change (same as in Planning Aid D).

1. _____

2. _____

3. _____

4. _____

┌───┐
│ **Planning Aid M:** Indicate any additional items or │
│ procedures that will be included in the RAP   │
│ study.   │
└───┘

Check any of the following additional items or procedures that will be included in the RAP
study.

_____ Interview items to elicit suggestions for improving the program
_____ Calculation or estimate of the costs of the program
_____ Interview items to obtain biographical information on the interviewees
_____ A field test of the interview instrument

5 2

Planning Aid N: Indicate who will do the RAP interviewing.

Indicate the approximate number of interviews that each of the following types of interviewers will conduct.

_____ County or area staff assigned to the program
_____ Subject-matter specialist(s)
_____ Paid program assistants or paraprofessionals assigned to the program
_____ Volunteer extension leaders working on the program
_____ District director/program leader
_____ County or area staff not-assigned to the program
_____ Paid interviewers
_____ Extension secretarial staff
_____ Program development committee or council members
_____ Other (specify) _____
_____ = total number of interviews planned (should match number indicated in Planning Aid E)

Planning Aid O: Indicate who will train interviewers and test the interviewing procedures.

Check who will train the interviewers.

_____ County agent
_____ District director/program leader
_____ Subject-matter specialist
_____ Evaluation specialist
_____ Volunteer extension leader
_____ Other (specify) _____

Check who will be responsible for testing the interviewing procedures.

_____ County agent
_____ District director/program leader
_____ Subject-matter specialist
_____ Volunteer extension leaders
_____ Other (specify) _____

53

Planning Aid P: Indicate plans for interviewing procedures.

Check any of the following interviewing procedures that will apply to the study.

_____ A coordinator for the interviewing effort will be named from the RAP team.
_____ A date will be set by which time all the interviews should be conducted.
_____ Guidelines will be set on the time of day (or evening) when telephone calls or personal visits will be made.
_____ Guidelines will be set on whether appointments will be made for conducting the interviews.
_____ Guidelines will be set on how many times an interviewer will attempt to reach an interviewee.
_____ Responses to the probe questions will be precoded.
_____ Other (specify) _____

Planning Aid Q: Indicate plans for analysis.

Check the plans you will make for analyzing the interview data.

_____ A coordinator for the analysis effort will be named from the RAP team.
_____ Responses will be tallied according to analysis categories (check as many of the following three categories as apply to this option):
_____ personal characteristics of the participants
_____ educational method participants were exposed to
_____ content of the program participants were exposed to
_____ Computer assistance for the analysis will be sought.
_____ Response tallies will be converted to percentages.
_____ Tallies or percentages will be converted to bar graphs.
_____ Other (specify) _____

Planning Aid R: Indicate procedures for drawing conclusions and evaluating the program's results.

Check the procedures that will be used to reach conclusions and evaluate the program's results.

_____ The RAP team will inspect the findings to reach conclusions or arrive at interpretations concerning what the results of the program were.
_____ An appraisal or evaluation of the results of the program will be made.

The RAP team will evaluate the program's results by (if applicable):

_____ employing whatever criteria each team member feels is appropriate after the findings from the interviews are available.
_____ comparing actual findings of the study with *expected* responses recorded before the interviews are conducted.
_____ Other (specify) _____

Planning Aid S: Indicate plans for helping decision makers to use the RAP study.

Check your plans for making recommendations to decision makers or otherwise helping them use the study.

___X___ Issues regarding the program's future will be posed.
_____ Alternatives for the program's future will be identified.
_____ The implications of selecting each alternative will be projected.
_____ One or more alternatives for the program will be recommended.
_____ A subgroup of the RAP team will pose issues, identify alternatives and implications. and make recommendations for review and acceptance by the entire team.
_____ Issues, alternatives, and/or recommendations will be directed toward decision makers external to extension. as well as toward decision makers within extension.
_____ Other (specify) _____

Planning Aid T: Indicate plans for communicating the RAP study.

Check the way(s) you intend to package and communicate the study findings, conclusions, and recommendations.

_____ Through special mailings summarizing or reporting on the study
_____ Through a news release on the study
_____ Through regular reporting channels aimed at extension administration, county legislators, county commissioners, etc.
_____ Through meetings to brief selected audiences on the study
_____ By feeding-in findings, recommendations, etc. during program planning meetings, budget meetings, etc.
_____ Through a variety of brochures focusing on specific aspects of the study of interest to selected audiences
_____ Through volunteer extension leaders who will informally transmit the study's findings to county and state policy makers
_____ Other (specify) _____

55