Evaluation Guidebook Workshop

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Abstract

Evaluation, as a process, is a comprehensive one that begins with the identification of need and permeates the entire program development process. Needs assessments, situational analyses, and environmental scans are basic processes in identifying and prioritizing needs that can be addressed with programs. In some cases, if there is ambiguity as to whether there is a program to evaluate, then the educator should implement an evaluability assessment. Evaluation and evaluation decisions are planned before the program is implemented. After the program is implemented, it is important to monitor how the program unfolds and the involvement of program participants. Finally, evaluation is the means of determining whether the program has reached its goals or objectives.

Overview of Program Evaluation Steps

1. Develop and enhance an environment that is conducive to evaluation.
2. Identify the program, or in some cases, the program activity to be evaluated.
3. Identify and develop strategies to address evaluation barriers that are likely to arise.
4. Decide to whom you will report the results of the evaluation.
5. Identify and describe the major reasons for evaluating the program.
6. Determine the program participants who will be evaluated.
7. List and examine the objectives of the program.
8. Decide on the types of evaluation evidence that you will collect.
9. Identify types of benchmark data that are needed.
10. Develop an evaluation design including methods and data collection techniques.
11. Develop or obtain instrumentation for collecting evidence.
12. Conduct the evaluation.
13. Summarize and analyze the collected evaluation evidence.
14. Study the results of the analyses.
15. Prepare reports for major stakeholders.
16. Deliver evaluation conclusions to decision makers.
17. Use the information in the program development process.
Evaluation Guidebook Notes

Step #1 Develop and enhance an environment that is conducive to evaluation.

Competition for scarce resources undermines public support for increased spending and creates the context for systems of accountability which reflects a well-developed organizational strategic plan with realistic performance measurement efforts. Incorporating strategic plans into programming efforts and linking vision and mission to the budgetary process by funding programs to achieve desired behavioral change in clientele provides stakeholders and decision makers the power to hold agricultural and extension organizations accountable for resources, both material and personnel. The pursuit of quality Extension programs involves the identification of outcomes (impacts) for each programmatic element. These impacts should reflect the organization’s commitment to bringing about intended changes in our clientele.

Step #2 Select the program or program activity to be evaluated.

Let’s define a program as “a set of logically, interrelated activities using existing or obtainable resources to bring about change in an individual, group, or larger component of society”. If we think about a beef cattle program, then we are including activities such as: increasing the producer’s knowledge of nutrition; the adoption of best management practices; the end result of marketing quality animals; the development of a teaching curriculum, the gathering of producers at a quarterly meeting; the production of a producer newsletter; the recruitment of volunteers; length of producer participation; etc. When all these activities are taken together, we have a program. In some instances, the educator may decide to only evaluate one component of the total program.

Step #3 Identify and develop strategies to respond to program evaluation barriers.

There are a number of situations that may arise which may be potential sources of resistance to program evaluation. Sources include:

- slam bang effect: undocumented conclusion that the program had to produce the outcomes;
- self-styled experts: increasing number of individuals who promote themselves as evaluators without training, expertise or experience;
- fear of program termination: monotonic judgment that program deletion is the only possible evaluation outcome;
- fear that information will be misused: another reason to build a system of trust and reciprocity between evaluator and stakeholders;
- fear that qualitative methods will be supplanted: basic logic holds that the use of multiple methods is preferred;
- accusations that evaluation methods are insensitive: to be sure, strict empirical referents need to be combined with other traditional interpretive skills;
- evaluation drains money: a major reason to build the context where evaluation is an integral part of program development; and
- evaluation has little impact: a major reason to deliver evaluative results at the right
time, in the right format, with the appropriate style for the right decision makers.

**Step #4 Decide to whom you will report the evaluative results.**

List the individuals and groups to whom you want to report the results of this program evaluation. Consider the roles of these individuals, the reasons for reporting to these individuals, and the probable results of reporting to these individuals. Persons whom you involve in the evaluation process will most likely be the persons most interested in using the results. Complete WORKSHEET 1 for each program or program activity evaluated.

**WORKSHEET 1: Audiences for Reports of the Results of the Evaluation**

<table>
<thead>
<tr>
<th>Audience</th>
<th>Reason(s) for reporting to this audience</th>
<th>Expected results of reporting to this audience</th>
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<tbody>
<tr>
<td>Myself</td>
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<tr>
<td>Other advisers</td>
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<td>Region/area advisers</td>
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<td>Councils</td>
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<td>Support Groups</td>
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<tr>
<td>Other ag/extension educators</td>
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<tr>
<td>General public</td>
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<tr>
<td>Program participants</td>
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<td>Government agencies</td>
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<tr>
<td>Other: specify</td>
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</table>
Step #5 Identify and describe the major reasons for evaluating the program.

Check any of the following reasons for evaluating this program or activity:

_____ to find out to what extent program objectives have been met

_____ to learn if teaching methods/strategies are effective

_____ to determine how the program participants changed or benefited from the program

_____ to learn what “works” with this audience

_____ to help local decision makers understand the results and values of programs

_____ to find out whether there should be more programs on this topic

_____ to find out what additional programs this audience needs

_____ to provide information for reporting and accountability for various stakeholders

_____ (Others) __________________________________________________________

Step #6 Determine the program participants who will be evaluated.

Describe the audience from whom you want to gather information for evaluation purposes. Identify the total audience (population) and the sample. Decide whether you will collect information from the total population or whether a sample will provide the needed information. Develop a sampling frame.

Step #7 List and examine the objectives for the program you have chosen to evaluate.

________________________________________________________________

________________________________________________________________

Distinguish between “management” and “behavioral” objectives. Remember behavioral objectives should meet the following criteria:

1. The objective describes what the learner will do.
2. The objective includes a description of the conditions under which the participant learns.
3. The objective includes the standards for judging.
Consider the following check list:

___do the objectives focus on what you want the program to accomplish?
___do the objectives focus on the target audience?
___do the objectives include what you expect the participants to know and to do after they complete the program?
___are the objectives specific enough to be measured?
___have standards been established which you can use to determine how well the objectives have been met?

Step #8 Decide on the types of evaluation evidence.

An excellent evidence hierarchy was developed by Bennett (1979) which consists of seven levels of evidence. The hierarchy is important in both the planning stage of program development and the assessment of program results.

Level 1: Inputs (expertise, volunteers, resources)
Level 2. Activities (farm visits, fact sheets, newsletters, etc)
Level 3. People Involvement (how many and how long)
Level 4: Reactions: (audience feedback on activities)
Level 5: KASA: (Changes in knowledge, attitudes, skills, aspirations)
Level 6. Practice Adoption: (do participants do what is learned or taught)
Level 7: End Results: (Social, economic and environmental consequences of practice adoption)

List the hierarchy levels which you will use in the evaluation of your program:

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Step #9 Identify types of benchmark data that are needed.

It is increasingly important that we need a baseline measurement of behavior to demonstrate the importance of programs in bringing about change in program participants. There are numerous sources of baseline data:

1. Records kept as part of the educational program
2. Records that other agencies keep
3. Existing records or data sets
4. Direct observation
5. Pretests and post tests
6. One shot methods where program participants are asked to recreate where they were before the program began
7. Success stories and testimonials

_________________________________________________________________
8. Surveys
9. Experimental designs
10. On-farm tests
11. Data collection as part of the program content
12. Scenarios

Consider the following ideas:
--Will you need to collect baseline data?
--How or what method will you use to collect the baseline data?

**Step #10 Develop an evaluation design including methods and data collection techniques.**

Consider the following questions in developing your evaluation design.

1. Who is the audience from whom you want to collect evaluative information or evidence?
2. What is the size of your audience?
3. Will you need to sample your audience?
4. What type and size of sample will you need?

What methods or techniques will you use to collect evidence?

- Personal interview
- Mailed questionnaire
- Telephone survey
- Group administered survey
- Check list
- Rating sheet
- Observation sheet
- Documentation from observers
- Pre-test/post-test
- Study of attendance, participation, or other
- Case study
- Investigative reporting
- Other(list)

______________________________________________

______________________________________________
When will you gather evidence for each of the evaluation methods you’ve chosen to use?

<table>
<thead>
<tr>
<th>Method</th>
<th>Before Program</th>
<th>During Program</th>
<th>Immediately following program</th>
<th>After time has elapsed</th>
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Step #11 Develop or obtain instrumentation for collecting evidence.

Preparing Evaluation Instruments

1. Fixed Choice Questions
   A. Gender: _____ Male _____ Female
   B. Highest level of education attained:
      _____ Less than high school
      _____ Some high school
      _____ High school graduate
      _____ Some college or technical/vocational school
      _____ College graduate
      _____ Graduate degree
      _____ Other (Specify ____________________________)
   C. Number of acres cultivated:
      _____ Less than 10
      _____ 10 to 49
      _____ 50 to 99
      _____ 100 to 199
      _____ 200 or more

2. Scale-type questions
   A. As a result of the program, I know how to install insulation in the attic.
      Agree 1 2 3 4 5 6 Disagree Already Knew How
   B. How important are farm visits by agricultural educator?
      Not at all 1 2 3 4 5 Very
3. Check lists
   Check all the benefits of program activity:
   ____ gained knowledge
   ____ made new contacts
   ____ developed new skills
   ____ obtained new resources

4. Open-ended questions:
   Describe two best management nutrition practices that you intend to adopt for your beef herd.

5. Open list of items:
   The three most important things that I learned about animal nutrition are:

   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

Construct and pilot test the evidence instrument.

**Step #12 Conduct the evaluation.**

**Step #13 Summarize and analyze the collected evaluation evidence.**

It is important to ascertain the level of measurement for the data collected. The level of measurement will dictate types of statistical analysis. Identify your level of measurement of the evidence collected:

   ____ nominal
   ____ ordinal
   ____ interval
   ____ ratio

Analysis of the evidence is based on the use of descriptive and inferential statistics.

A. Descriptive analyses
   __ Frequencies
   __ Percentages
   __ Percentage change
   __ Mean
   __ Median
   __ Mode
   __ Variance
   __ Standard deviation

B. Inferential analyses
   __ Relationships
**Step #14 Study the results of the analyses.**

Points to consider in decision-making:

1. Define decisions to be made (What’s involved, programs, people, resources, etc.)
2. Identify possible alternatives
3. Examine probable results of each alternative
4. Evaluate and rank alternatives
5. Select an alternative
   -- program works better
   -- reach more clients
   -- no change
6. Implement recommendations
7. Assess results of actions

Study the results in hand:
 -- how certain is it that the program caused the results
 -- how good were the results
 -- are results different than if no program
 -- use of control group
 -- strengths and weaknesses of program
 -- what conclusions and recommendations can be made

**Step #15 Prepare reports for major stakeholders.**

Do results of evaluation projects land in a “black hole”? Do agricultural and extension educators compile reports and never hear of their use? If evaluation results obtained with relevant data and limited resources are to be used, then we need to plan from the start how to best use those results.

Involving intended users of evaluation results produces ownership of the results and greater commitment to using the results. Involvement also ensures that we are asking relevant questions based on clientele needs. An evaluation advisory group made up of intended users can serve as advocates for program evaluation, help with completing tasks, help with resources, encourage greater participation of clientele, give more attention to findings, and help to more widely disseminate findings to significant stakeholders.
Table 1 Content and Users of Program Evaluation Results

<table>
<thead>
<tr>
<th>Who?</th>
<th>What?</th>
<th>How use?</th>
</tr>
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<tbody>
<tr>
<td>Educator</td>
<td>Program content</td>
<td>Make program adjustments meeting needs?</td>
</tr>
<tr>
<td>County Stakeholders</td>
<td>Who are participants?</td>
<td>Make decisions about stakeholders’ budget allocations</td>
</tr>
<tr>
<td>Extension</td>
<td>Program met objectives</td>
<td>Justify program/administrators allocated budget</td>
</tr>
<tr>
<td>Clientele</td>
<td>Program meeting their needs?</td>
<td>Decide to participate in future</td>
</tr>
</tbody>
</table>

Step #16 Deliver evaluation conclusions to decision makers.

Elements of a good report:
--why was particular problem selected for study
--purpose of evaluation
--did program accomplish purposes
--recommendations based on evaluation
Described how program accomplished purpose:
--instruments yield necessary data
--instruments are valid and reliable
--instruments are appropriate for participants
--evaluation model appropriate for problem and purpose
--analyses related to goals and objectives
--each objective addressed by appropriate statistical analysis
--results clearly specified
--recommendations flow from analysis
--have practical and statistical significance
--all make sense
--steps clearly specified so no questions about what was done

Review recommendations made:
--what differences do results make to clientele
--what differences do results make to educators
--what differences do results make to administrators
--what differences do results make to community members
--what differences do results make to the field

Step #17 Use the information in the program development process.