The use of LOGIC model in Extension program planning is quite common. Various types of Extension surveys can be conducted in order to measure needs, process and impacts of Extension activities at various (‘inputs’, ‘outputs’, and ‘outcomes’) stages of project implementation. Utilization-focused Extension evaluations are conducted to bring continuous improvement in program delivery instead of year-end evaluations. This bulletin describes types of Extension evaluations from the applied perspective based on University of Wisconsin’s basic description (Taylor-Powell and Henert, 2008). The uniqueness of this bulletin is that it combines LOGIC model theory with Kirkpatrick’s Four Levels Evaluation Model (Reaction-Learning-Behavior-Results) for Extension professionals.

Needs Assessment
This type of assessment is the starting point toward the development of need-based outreach programs. Types of needs that can be documented via surveys include felt needs (audience demand for change) and unfelt needs (unknown needs). Unfelt needs can be converted into felt needs by adjusting context.

Usefulness of Needs Assessment
Results of needs assessment may also be used to justify continuation of active educational programs and in establishing program priorities.

When to Conduct These Surveys
At the beginning of programs, during programs, end of old programs (future directions).

Example Questions
What are the characteristics of audience? What are the needs of audience? Where does the audience find information (i.e., information searching behavior and pattern)? What are the best educational approaches for specific audience? What are the barriers to technology adoption?

Practical Tips for Evaluators
Needs assessment surveys can be conducted during training events (random sampling) or Advisory Panel meetings (nonrandom sampling). Paper-based questionnaires are excellent for deep probing surveys. Make sure you provide adequate time to your audience to respond to open-ended questions. Include needs survey in event agenda and motivate participation from audience. Take plenty of survey prints, pens and pencils if you want your audience to provide written answers. Electronic surveys using clickers also can be conducted for close-ended questions (pre-adjust response time).
**Process Evaluation**
This evaluation is Kirkpatrick’s Level 1 - Reaction. These surveys can help determine the satisfaction level of clientele, quality of services provided, and who are the beneficiaries of educational effort. This is the most basic form of evaluation that can be used in supporting all higher levels of evaluation. Extension personnel can conduct event assessment surveys as a tool of documenting quality of outreach event, target audience, and for understanding learning preferences.

**Usefulness of Process Evaluation Surveys**
This type of evaluation survey is especially useful for documenting success in program implementation and for determining future needs of a diverse clientele.

**When to Conduct Process Surveys**
Conduct surveys at each regional or multi-county event, during client visit to Extension offices for consultation, etc.

**Example Questions**
What is your major occupation (target audience)? Were you satisfied with delivery methods? How would you rate the overall quality of presentations at this event? How would you rate the quality of Extension publications distributed today? Was there too much information? Will you recommend the educational training to your colleagues?

**Outcome Evaluation**
This evaluation is Kirkpatrick’s Levels 2 & 3 - Learning & Behavior. This evaluation type assesses the relationship between products and services (outputs) delivered and the extent of behavioral changes that has occurred due to an educational program.

**Usefulness of Outcome Evaluation**
Goal of these evaluations is to understand the overall effectiveness of program inputs and outputs in producing the desired changes in behavior. Thus, outcome evaluations are useful tools to document extent of learning as a self-motivated process that can modify or increase existing knowledge, attitude and skills.

**When to Conduct These Surveys**
At crop production meetings, small group meetings on farm (e.g., pre- and post-test surveys or learning assessment)

**Example Questions and Practical Tips for Evaluators**
Document short-term changes in audience behavior by developing survey questionnaire that include some key words like "awareness", "knowledge", "opinion" and "motivation" within the survey instrument. You can document medium-term changes in audience behavior by using key phrases like "change in practices", "technology adoption decision", "actions taken", etc. Document any unintended outcomes of the training program. You may have to incorporate multiple evaluation tactics (see below) to do sophisticated surveys that can provide a reliable assessment of program impacts. For on-farm surveys, do not forget to take a reliable digital camera that can record high quality videos and images of producers for your Extension success stories. Remember to share due authorship with Extension team members and earn the appreciation of others.
Impact Evaluation
This evaluation is Kirkpatrick’s Levels 4 – Results. This is the final step to documenting program success after a period of time (3 – 5 years). This type of evaluation is easier to conduct for focused outreach programs (like integrated pest management in specific crop) but more difficult for short-term training projects. Grant-funded programs, which are generally focused on resolving a specific issue or client need, are easier to evaluate compared to broad programs catering to a diverse range of audience.

Usefulness of Impact Evaluation
These evaluations can be used to develop success stories for programs based on significant environmental, economic and/or social improvements. Program managers for long-term educational initiatives should allocate substantial time, effort, and resources to impact evaluations that can benefit future initiatives.

Example Questions
Try to track changes in economic, environmental and/or societal changes occurring after complete execution of program (summative evaluation). This may require extensive travelling and on-site interaction with clientele. A variety of survey techniques may be needed to do impact assessments. Try to identify and reduce "background noise" during evaluation in order to increase reliability of findings. Focus on new products and services that could be causing shift in practices. Sudden major changes in technology adoption or rejection should be recorded. Try to assess client motivation to technology adoption in the absence of the education program (e.g., compare adopters versus non-adopters, early adopters versus late adopters).

Usefulness of "Performance Indicators"
Performance indicators can be used to determine progress of long-term educational programs. Indicators are developed on the basis of program objectives and include specific measures such as participation rate, change in client satisfaction, decrease or increase in usage of agricultural inputs, number of meetings or workshops, number of publications, subscriptions to publications, etc. The major advantage of using indicators is that success can be measured continuously instead of waiting for year-end impact assessments. Testimonials collected via phone calls, workshops, and interviews can be part of performance indicator. Disadvantages of indicators include: 1.) educators may get distracted from the overall program goals; 2.) indicators by themselves could lead to wrong conclusions.

To Learn More About Program Evaluation, Visit:
- Program Development and Evaluation, University of Wisconsin-
References Cited:

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