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Measuring Extension Program Impacts: 3. Evaluating Program Success

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Within Cooperative Extension, we are required to report on the success of an Extension program in achieving its intended goals. This first requires the development of **goals and objectives** for each educational program (Larese-Casanova 2017a). **Participant assessment**, the measure of knowledge gain and application of practices, helps us understand whether program objectives were fulfilled (Larese-Casanova 2017b). **Program evaluation** is the measure of fulfillment of the program goals, and helps us answer the important question of "did the program result in positive impacts?"

Needs Assessment

The very first step in evaluation, and in developing an Extension program for that matter, is to determine the level of need for the program. This may become apparent through several different processes. For example, clients or past participants might request a new program, an obvious gap in available training might exist, new management issues or challenges might arise, or the economic environment might change. It might also be necessary to conduct a needs assessment, which is a kind of formative (i.e., early) evaluation.

A **needs assessment** is a process by which an Extension educator identifies the gap between the programming that currently exists, and that which the stakeholders need (Altschuld & Kumar, 2010). A needs assessment may start with a committee of educators, stakeholders, or community members, who help identify key gaps in available programming. If the gaps are not clear, data may need to be gathered through surveys, interviews, focus groups of stakeholders, or by analyzing census data (Caravella, 2006). A needs assessment can provide valuable support for developing a program and a grant proposal to fund a program (Angima, Etuk, & King, 2014). By first establishing a need for an Extension program, the educator can be reasonably certain that the investment of time and resources into creating the program will be well spent.

Evaluation Tools

Evaluation tools generally fall into two main categories—self-reporting and observation. If one kind of evaluation tool is not sufficient in measuring program success, several may be implemented to truly evaluate program success.

Self-reporting often involves the standard questionnaire delivered at the end of a program, or even follow-up surveys at a certain time after a program. Participant interviews or testimonials are also valuable tools for evaluating program effectiveness. While self-reporting can seem more qualitative (i.e., anecdotal), participant respons-

es to statements can be quantified and analyzed when a Likert scale is used.

Observations can occur during an Extension program through participant assessment, or even after the fact through tasks that involve participants demonstrating practices and adopting behaviors. For instance, participating in an energy conservation program may result in lower electricity or gas utility bills for each month following the program, when compared to the previous year. Or, participating in an Extension agronomy program may contribute to an increased yield of a particular crop the following year. It is important to design tools, such as surveys or interviews, that will adequately capture this information from the participants, especially once the program has ended.

Participant Satisfaction

While it is important to evaluate participant satisfaction with an Extension program, it is the bare minimum in terms of program evaluation. Understanding whether a program was enjoyable or worth the participants' time helps us evaluate the tone, format, or overall structure of an Extension program. If the participants find little satisfaction with a program, something fundamental to program success is missing. But, remember, evaluation helps determine whether the program goals were met, and surely, programs goals include much more than simply developing a program that participants enjoy.

Instructor Effectiveness

Achieving program success requires not only a well-designed curriculum, but also effective instructors. The quality of a curriculum can be irrelevant if the delivery is poor. Therefore, it is important to measure the participants' perception of the degree to which instructors are not only knowledgeable, but also engaging. Understanding others' views of our knowledge level and teaching style can only help us to improve as educators.

Program Impacts

Program impacts are "the difference we make in people's lives as a result of programs we conduct" (Diem, 2003). Measuring program impacts can be challenging, especially since goals can be broad and intangible. However, the logic model that is the skeleton of an Extension program identifies the specific outcomes/impacts that are expected to occur. Begin with the short-term impacts, and determine the best way to measure these impacts during or at the end of an Extension program. Then, decide whether the same tools will help in measuring medium-term impacts, or if different tools are needed. Long-term impacts are hardest to measure, since more time passes and other activities influence the participant. Using our example of a Wetland Explorers Summer Camp (Larese-Casanova, 2017a), specific tools can be identified for each desired impact (Table 1).

Short-term programs (i.e., a few hours to one day) can present some challenges in accurately evaluating the program impacts. Participants are in contact with the instructor for a short time, and extensive assessment and evaluation can consume valuable class time. In these cases, a retrospective pre-post evaluation may be the best measure of adoption of practices and changes in behavior (Raidl et al., 2004). Asking participants at the end of a program how their confidence in their skills and abilities have changed as compared to before the program through self-efficacy reporting is a useful measure of impacts (Bandura, 2006; Nielsen, 2011).

Table 1. Tools for evaluating the impacts of a Wetland Explorers Summer Camp Program.

Outcomes/Impacts					
Short	**Tools**	**Medium**	**Tools**	**Long**	**Tools**
• Increased knowledge • Understand impacts to wetlands • Develop personal goals	• Pre-post assessment • Conduct a wetland survey • List project goals on evaluation form	• Increased appreciation for wetlands • Participate in a wetland project • Support from adults	• Pre- and 1-month survey 1. Draw and describe a wetland 2. Completed project? 3. Did adults help?	• Positive attitude toward nature • Increased stewardship of nature	• Pre- and 6-month nature relatedness survey 1. Time spent in nature? 2. Additional projects completed?

Writing Impact Statements

Impact statements convey the benefits of an Extension program to stakeholders in a brief, meaningful, way. They are particularly useful in conveying the value of a program to supervisors and funding agencies (Diem, 2003). For example, a simple impact statement for a financial planning program might be: "Over the past 5 years, the Extension Financial Planning program has helped 238 families decrease their debt by at least 28% and increase their annual savings by an average of 21%. This program also led to the adoption of college savings programs, increased credit scores, and greater overall feeling of financial sustainability in over 75% of the participants. We believe that these trends will help overcome the cycle of intergenerational poverty in the county." eXtension offers a new impact statement reporting course to assist Extension educators in demonstrating the value of their programs to the public, administrators, and funders (Lippke, 2015).

Program Improvements

In addition to helping determine program success, evaluation is a valuable tool in identifying specific areas in which a program requires revision. Once revisions are completed, and the Extension program is delivered to a new audience, improved evaluation results will verify that the revisions were successful (Larese-Casanova, 2015).

Evaluation results, when connected to assessment and demographics data, can reveal a complete picture of how each participant, with his or her own experience and knowledge levels, evaluates a program. This aids in understanding which particular audience is likely to benefit the most (i.e., have the highest gains in assessments and evaluate the program more positively), and, therefore, should receive the highest recruitment effort (Larese-Casanova, 2011).

Viable Data Collection

It is important to consider the way in which we collect evaluation data to ensure its viability. Keeping participant names anonymous is perhaps the most essential step. Connecting an evaluation form to assessment surveys can be achieved through coding the documents (e.g., have participants write the month of their birth date and the same last four digits of a family member's phone number on each form). It is ethical to collect only the data that is needed and will be used. Lastly, if any of the evaluation results will be presented or published in a public medium, it is important to seek pre-approval from the respective Institutional Review Board.

Evaluation is a circular process that reveals the impacts of an Extension program on participants' lives, and guides program improvements to maximize impacts to future participants

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