Relationship between Program Outcomes and Impacts

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After this class, you will know...

• Evaluation definition & basics
• Evaluation Four Levels Model
• Formative vs Summative Evaluations
• How to use Logic Model in evaluation planning
• Differentiate between Output, outcome & impact
Evaluation

- Evaluation is the **systematic collection** of information about the merit, worth or significance of a program.

- **Evaluation criteria:**
  - Useful
  - Feasible
  - Appropriate
  - Accurate

- Ext. evaluation is used for **plausible conclusions**, not cause & effect!

**Activity:** Review handouts
Why evaluate...

THE ACCOUNTABILITY ERA

• What gets measured gets done.
• If you don’t measure results, you can’t tell success from failure.
• If you can’t recognize failure, you can’t correct it.
• If you can demonstrate results, you can win public support.
• If you do not evaluate, it is an opportunity lost to demonstrate public support.

Re-inventing government, Osborne and Gaebler, 1992
Stay motivated to evaluate!

PERCEPTION

• My clients like me, so I do not need to evaluate.

• Evaluation is hard & outside my job

• Public does not respond to my surveys.

• Nobody is going to look at the evaluations once they are done.

REALITY

• Evaluation helps document your success.

• 20% effort generates 80% information. Do some evaluation at every event than doing nothing.

• Provide time to respond, part of agenda, show improvements!

• Share the results with speakers & administrators. Learn to extract useful information for reporting.
Evaluation Methods

KIRKPATRICK’S FOUR LEVELS MODEL

During program activity...

- Level 1: REACTION (quantitative)
- Level 2: LEARNING (QUAN + qualitative)

Post-program evaluation...

- Level 3: BEHAVIOR (QUAL + quantitative)
- Level 4: RESULT (qualitative)

*Hands-on Quan/Qual training using volunteers.*
Utilization-Focused Evaluation

CDC Framework for Program Evaluation
WHEN & HOW DO WE EVALUATE?

Program Action - Logic Model

Inputs
- What we invest
- Staff
- Volunteers
- Time
- Money
- Research base
- Materials
- Equipment
- Technology
- Partners

Outputs
- Activities
- Participation

Outcomes - Impact
- Short Term
- Medium Term
- Long Term

Priorities
- Consider:
  - Mission
  - Vision
  - Values
  - Mandates
  - Resources
  - Local dynamics
  - Collaborators
  - Competitors

Intended outcomes

What we do
- Conduct workshops, meetings
- Deliver services
- Develop products, curriculum, resources
- Train
- Provide counseling
- Assess
- Facilitate
- Partner
- Work with media

Who we reach
- Participants
- Clients
- Agencies
- Decision-makers
- Customers
- Satisfaction

What the short term results are
- Learning
- Awareness
- Knowledge
- Attitudes
- Skills
- Opinions
- Aspirations
- Motivations

What the medium term results are
- Action
- Behavior
- Practice
- Decision-making
- Policies
- Social Action

What the ultimate impact(s) is
- Conditions
- Social
- Economic
- Civic
- Environmental

Taylor-Powell & Renner, 2000
**Purpose of Evaluation**

**Formative evaluation**
- Done when the program is active
- Course correction
- Repetitive
- Flexible (mixed) designs

**Summative evaluation**
- Done at the end of a program
- Measure impact
- One time use
- Rigid design, expensive

**Q&A:** Which type you do most frequently? What are the most common techniques?
Outputs = identify **stakeholders**, then **deliverables** from the program, i.e., activities (workshops nos.), participant nos., publications, phone call queries, new partnerships formed.
What are Outcomes?

- Measure **knowledge** change that occurred after program
- Measure **attitude** change that occurred due to training
- Measure change in **skills**
- Other measures: motivation, aspirations, opinions
- Use a variety of quantitative & qualitative tests
Outcome ‘Indicators’

• Are critical questions
• Are based on program objectives
• Are used for monitoring progress
• Usually expressed as rates, percentages, efficiencies, etc.
• There should be few trackable indicators, e.g., publication usage, website usage, participation level, qualitative indicators
Evaluation techniques

**Immersive tests:** in-depth examination of particular groups or individuals

Measure: Change in knowledge, confidence
HOT TIP: Retrospective Pre- & Post-Test

<table>
<thead>
<tr>
<th>Knowledge before meeting</th>
<th>Knowledge after this meeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very low</td>
<td>Low</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Very low</td>
<td>Low</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**Advantages:** Large amount of data in short time

**Disadvantages:**
- This is not impact but an outcome evaluation!
- Depends on person’s mood (subjective)
- Participants could ‘walk out’ without feedback
HOT TIP: Intervention-oriented Pre/Post Test

- Ask questions based on program content
- Insert a confidence measurement tool
- Combine with reactive instrument

**Advantages:** Emphasizes key points

**Disadvantages:** Presenters have to conduct the test, time-consuming
**HOT TIP:**

**Pre- & Post-Test Analyses**

<table>
<thead>
<tr>
<th>Question type</th>
<th>% correct answers</th>
<th>How many of the correct responses were confident answers (%)</th>
<th>How many of the correct responses were guesses (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRE-TEST (N = 28)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q 1. Tobacco budworm (picture)</td>
<td>54</td>
<td>25</td>
<td>75</td>
</tr>
<tr>
<td>Q 2. Western corn rootworm (picture)</td>
<td>43</td>
<td>18</td>
<td>82</td>
</tr>
<tr>
<td>Q 3. Pherocon corn rootworm trap (picture)</td>
<td>32</td>
<td>11</td>
<td>89</td>
</tr>
<tr>
<td>Q 4. Black cutworm (picture)</td>
<td>68</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>Q 5. Bean platsapid awareness</td>
<td>11</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td><strong>POST-TEST (N=28)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q 1. Tobacco budworm (picture)</td>
<td>75</td>
<td>79</td>
<td>21</td>
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<td>NA</td>
<td></td>
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NA = not available

CCA training, 2009

**Highlights:**

- 51% increase in knowledge
- 56% increase in confidence
Evaluation techniques

Tests: assess knowledge, skills, performance, e.g., pre-test & post-test

Skills test with insect specimens, 2010
Behavioral change surveys

5. In one of the sessions, we discussed at length the proper use of a systemic insecticide (imidacloprid) for vegetable production. Did that and subsequent discussions motivate you to purchase the actual product?

<table>
<thead>
<tr>
<th>Response</th>
<th>Percent</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, I did.</td>
<td>55.6%</td>
<td>5</td>
</tr>
<tr>
<td>No, I did not.</td>
<td>11.1%</td>
<td>1</td>
</tr>
<tr>
<td>I may purchase it next year.</td>
<td>33.3%</td>
<td>3</td>
</tr>
<tr>
<td>answered question</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>skipped question</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

- Southern Sustainable Agriculture Working Group Conference, January 19-22, 2011, Chattanooga, TN (n = 35): Response rate of 53% (+20% from 2010); average organic/sustainable farm size was 7 acres; 68% growers used ACES website (+12%) and 46% respondents used social media. 35% producers have used the IPM newsletter & were aware of the vegetable IPM program (+19%); squash bugs and stink bugs were mentioned as critical pests; 23% producers who visited the IPM Exhibit in 2010 used the information for better farming and 30% respondents did not. 45% growers who visited the IPM Exhibition in 2011 said they will use the IPM information. 68% growers wanted the join the Facebook page. Participant comments: “Thank you for doing this! Facebook is a good way to get the word out.”
Impact assessment

• Usually done at the end of a program
• Program benefits judged on economic, environmental and social aspects
• Done after some years of formative evaluations
• Formative feedback tracked over time can help design impact questions
• Quantitative + qualitative standardized instrument
Impact assessment pilot study

- Develop a survey instrument and do a pilot test
- More QUAL with many indicators, some QUAN
- On-farm evaluation best for capturing images and videos
Thank you for your attention. Outcome survey will be sent you by email.

Questions?