Program Evaluation & Survey Design Techniques

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Session Overview

❧ Purpose of extension program evaluation

❧ Evaluation survey types/methods

❧ Logic model, begin with the end in mind

❧ Formatting survey questions/question types

❧ Analyzing survey results

❧ Online survey options

❧ Resources

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Program Evaluation Purpose

- Track participant progress towards achieving
  - Short-term goals (changes in knowledge, skills & attitude)
  - Long-term goals (changes in practice; economic, social, and environmental impacts)

- Make participants more accountable for their learning

- Help to shape and modify program content

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Program Evaluation Purpose

ભ Document success stories

ભ Demonstrate value and effectiveness of program effort and resources

ભ Create transparency and improves accountability

ભ Build statewide and regional program capacity

ભ Strengthen stakeholder base

ભ Provide a driver and decision-making tool for future program efforts…."What's next?"

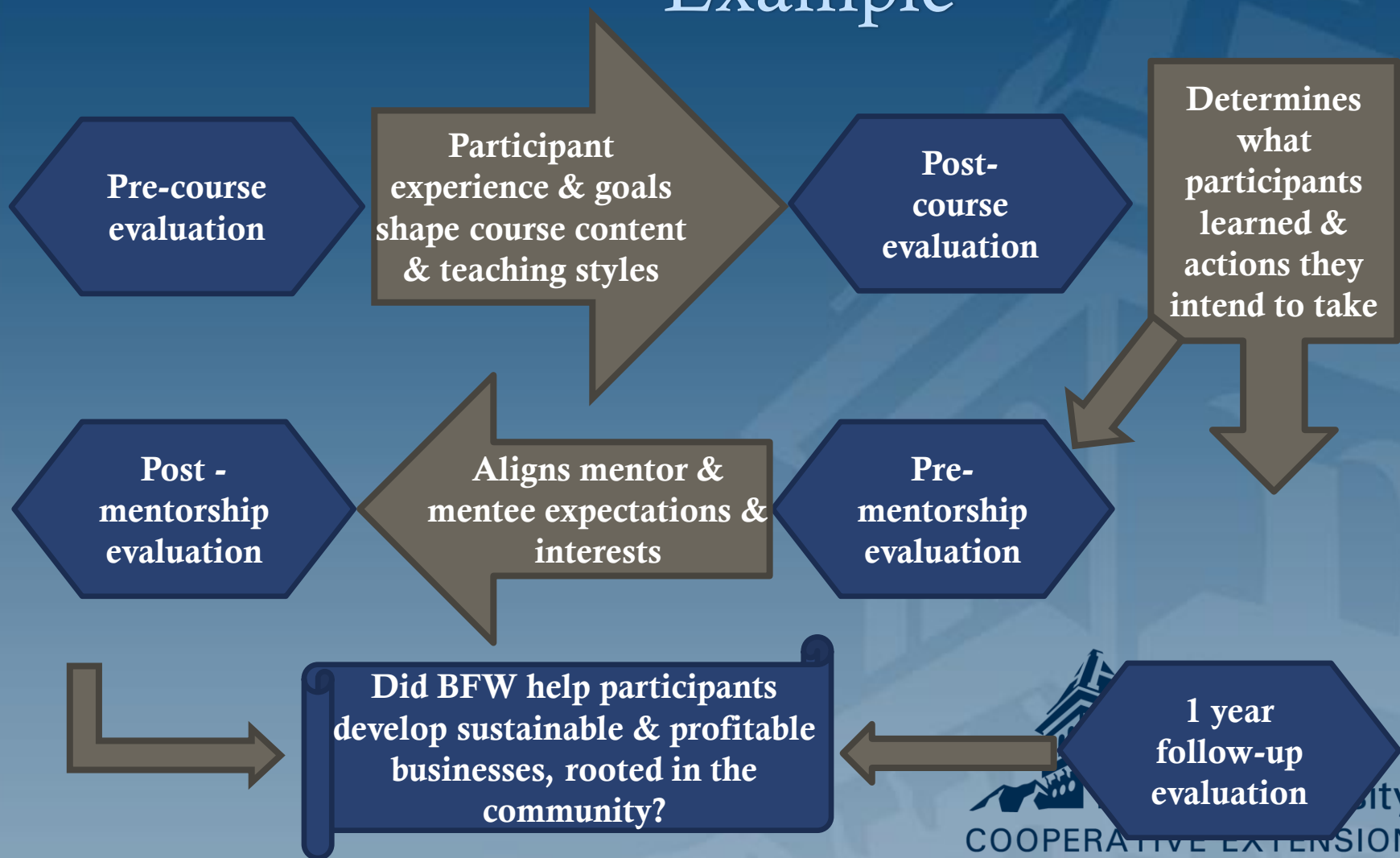UtahState
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Extension Program Surveys

- Needs assessments

- Pre-program assessments

- Post-program assessments
    - Retrospective assessments

- Mid-program or daily assessments

- Follow-up assessments

- Knowledge gain quizzes

- Other

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Building Farmers in the West Example

Pre-course evaluation

Participant experience & goals shape course content & teaching styles

Post-course evaluation

Determines what participants learned & actions they intend to take

Post - mentorship evaluation

Aligns mentor & mentee expectations & interests

Pre-mentorship evaluation

Did BFW help participants develop sustainable & profitable businesses, rooted in the community?

1 year follow-up evaluation

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Three Tiered Evaluation Approach

- Pre-course assessment – Completed prior to or on the first day of the course
  - Measures participant current knowledge, skills, experience, attitudes, and learning goals

- Post-course assessment – Completed on the final day of the course
  - Measures changes in participant knowledge, skills, and attitudes as a result of course participation, as well as intended practice change

Three Tiered Evaluation Approach

ও Follow-up assessment(s) – Initially completed one year after course completion, then annually….

    ও Measures participant adoption of knowledge/skills, actual practices changes, and impacts to their operation

    ও Measures private and public level impacts, economic, social, and environmental

Begin with the end in mind….

∞ What do you want participants…
  ∞ To learn (skills, knowledge)?
  ∞ To realize or consider (attitudes)?
  ∞ To do (practice change, objectives)?
  ∞ To accomplish (impacts, goals)?

∞ What are the economic, social, and/or environmental impacts?
  ∞ To participants
  ∞ To non-participants (public value)

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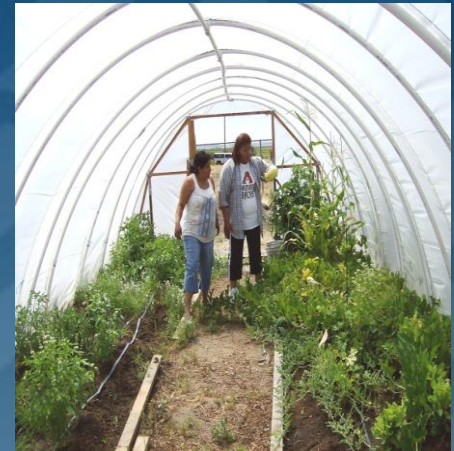
Change Continuum

Understand → Analyze → Decide → Develop → Implement → Impacts

- Measuring impacts is measuring change

- Not all programs will lead to final impacts

- Impacts can also be movement along the continuum

- Final impacts cannot be measured at the workshop, only through follow-up

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Impact and Evaluation

- Crafting Impact Statements
  - Stating the activity isn't enough, must relate to outcomes such as increased jobs, sales, etc.

- For example
  - "Conduct market manager training"
    - Not enough
  - "Market manager training will lead to increased produce sales " through…
    - Added vendors
    - Increased attendance
    - Other _____

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Impact and Evaluation

Impact Statement Example

- Vendor GAP training will increase use of GAPs by 30%

- FM manger training will lead to increased produce sales

- Farmer use of incubator kitchen expands sales of value-added products

Evaluation Technique

- Conduct follow-up survey with vendors to verify implementation of GAPs

- Compare vendor produce sales 2 and 4 months after manager training to pre training produce sales

- Conduct pre and post (6 months) assessment of farmer value-added product sales

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Survey Design Considerations

- Question formats – use several
    - Open-ended
    - Multiple choice
    - Yes/no
    - Likert rating scales
    - Semantic differential scales

Open Ended

- Not very reliable for surveys due to variety & coding issues

- Best for focus groups or individual interviews
  - Identify range of answers that may be used in a survey later

- Examples
  - What topics would you like to see covered in future workshops?
  - Please describe the financial benefits to your operation, family, or community which have resulted from your participation in this course.

Multiple Choice

❧ Provides a range of potential answers

ᘒ Answer choices must be based on research (focus group) or on standard norms (census groupings)

❧ The respondent chooses the one that is most applicable

How far did you travel to attend this workshop?
- ☐ Less than 20 miles
- ☐ 21-50 miles
- ☐ 51-100 miles
- ☐ 101-200 miles
- ☐ More than 200 miles

What is the value to you of attending this workshop or the benefits you estimate will accrue to your operation/job from changes you will make as a result of attending this workshop?
- ☐ Less than $100
- ☐ $101-$500
- ☐ $501-$1,000
- ☐ More than $1,000

Dichotomous Choice (yes/no)

○ The questions only has a yes/no or true/false answer

○ Limit of choices cuts down on survey design & respondent uncertainty

○ Less information than rating scales

Would you recommend this workshop to others?
Yes ○   **No** ○

Semantic Differential Scales

෴ Used to rate knowledge level, usefulness, etc.

෴ 5, 7, and 9 point scales (odd number)

To what extent do you understand the following subjects? *(Please check only one response)*

	A Great Deal	Considerably	Moderately	Slightly	Not at all
Developing business plans	☐	☐	☐	☐	☐
Maintaining financial records & budgeting	☐	☐	☐	☐	☐
Using cost-effective production strategies	☐	☐	☐	☐	☐
Targeting viable customers for each product	☐	☐	☐	☐	☐
Using cost-effective promotional techniques	☐	☐	☐	☐	☐
Pricing products & implementing pricing strategies	☐	☐	☐	☐	☐
Using effective merchandising at direct markets	☐	☐	☐	☐	☐
Showcasing product variety & abundance at direct markets	☐	☐	☐	☐	☐
Assessing operation specific/applicable taxes	☐	☐	☐	☐	☐
Managing labor force & assessing seasonal labor requirements	☐	☐	☐	☐	☐
Complying with regulatory issues (food safety, zoning, etc.)	☐	☐	☐	☐	☐
Accessing local resources/technical support (agency, Extension, etc.)	☐	☐	☐	☐	☐

Likert Rating Scales

ભ Used to measure attitudes, intentions, and actions

ભ 5, 7, and 9 point scales (odd number)

Please indicate your level of agreement with the following statements. *(Please check only one response)*

	Strongly Agree	Moderately Agree	Unsure	Moderately Disagree	Strongly Disagree
A business plan should be developed prior to implementing crop/livestock production	☐	☐	☐	☐	☐
I understand the risks and opportunities associated with direct marketing/targeted wholesale marketing	☐	☐	☐	☐	☐
I understand the application & financial requirements for participation in agency (FSA,NRCS, etc.) programs	☐	☐	☐	☐	☐
I have previous experience developing business plans	☐	☐	☐	☐	☐
I currently have a business plan for my operation	☐	☐	☐	☐	☐
I follow a financial plan for my operation annually	☐	☐	☐	☐	☐
I follow a production plan for my operation annually	☐	☐	☐	☐	☐
I follow a marketing plan for my operation annually	☐	☐	☐	☐	☐

Survey Design Considerations

⌘ Use the same questions concerning participant knowledge, skills, and attitudes on both the pre and post-course assessments

⌘ If using a post-course assessment only (retrospective evaluation), ask participants to provide a rating before and after the course

⌘ Use the same questions regarding participant practice change on both the post-course and follow-up assessments

⌘ The follow-up assessment(s) should include questions regarding economic, social, and environmental impacts to participants and non-participants (community, others, etc.)

Retrospective Example

෫ Please rate your level of confidence in performing the following activities both before and after attending the workshop

1=Not confidant   2=Slightly confidant   3=Unsure 4=Very confidant 5=Completely confidant

Skill	Confidence Before					Confidence After				
Contacting a local farm for the first time	1	2	3	4	5	1	2	3	4	5
Knowing the best time of day to make a new contact	1	2	3	4	5	1	2	3	4	5
Knowing which farms in my area sell locally	1	2	3	4	5	1	2	3	4	5
Understanding what farmers need to know about my restaurant/customers	1	2	3	4	5	1	2	3	4	5
Understanding seasonal production capabilities/growing conditions in Utah	1	2	3	4	5	1	2	3	4	5
Understanding the needs of local farmers	1	2	3	4	5	1	2	3	4	5

Assessment Examples

- Handouts
  - Needs assessment
  - Three-tiered program assessments
  - Retrospective program assessment

Activities

 What not to do….

 Question design
   For the knowledge, actions, and conditions outcomes listed in the sample logic model
     Determine when and how they will be measured
     Create survey assessment question

Coding Responses in Excel

- Yes/No
  - No=0, Yes=1

- Multiple Choice
  - Start numbering at 1 for the first choice, and so on

- Rating scales (highest number is best response)
  - Strongly agree = 5, agree = 4, unsure = 3, disagree = 2, strongly disagree = 1
  - Very important = 5, important = 4, unsure = 3, slightly important = 2, not important = 1

- Handout

Analyzing Results

❧ Basic stats

   ❧ Averages, percentages, before/after comparisons

❧ Handout

To what extent do you understand the following subjects ?			Before	After	Improve
(5=A great deal, 4=Considerably, 3=Moderately, 2=Slightly, 1=Not at all)			Average		
The potential economic, social and environmental benefits of implementing ag/food tourism enterprises			3.03	4.07	34%
The activities, products, and events associated with ag/food tourism enterprises			2.97	3.73	25%
Benefits and challenges in sourcing restaurants			2.69	3.48	29%
Benefits and challenges in sourcing hotels/conference centers			1.95	3.34	71%
Assessing the economic feasibility of an ag/food tourism enterprise			2.74	3.67	34%
Tourist types and preferences related to ag/food tourism			2.36	3.63	54%
Creating cost and return projections (budgets) for a new ag/food tourism enterprise			2.72	3.61	33%
Management and resource requirements for establishing an ag/food tourism enterprise			2.56	3.59	40%
Tourism promotional methods and outlets			2.58	3.49	36%
Estimating demand for a new ag/food tourism enterprise			2.46	3.23	31%
Labeling and safety aspects of value-added food production			2.96	3.71	25%
Local value-added product processing regulations			2.80	3.67	31%
Safety and liability considerations in an ag/food tourism enterprise			2.93	3.72	27%
Average Improvement					**36%**

Online Surveys

- Low cost compared to mailings
    - Mailing and processing costs high
    - Returns rates marginal
    - Multiple mailings required

- Constituents and internet access
    - The majority of potential audience must have internet access
    - Collect participant emails with registration

- Provide course information, homework/assignments, reminders, and assessments through email

- Promote upcoming programs through email
    - Good for non traditional audiences

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Online Surveys

❧ Surveys easy to create and copy

❧ Coding automatic/analysis provided

❧ Accessible from any computer

❧ Allows multiple entries from same computer

❧ Email reminders to participants – no mailers

❧ May be approved by IRB
  ❧ No IP tracking (can switch off)
  ❧ No names or identifiers needed

❧ Link surveys to your website or facebook page

Some Options

- Survey Monkey

- Qualtrics

- Baseline

- Google Forms

- Google Consumer Surveys

- Kwik Surveys

- Others….

Program Impact Resources

- Washington State University Extension, WCRME project development resources http://westrme.wsu.edu/grant-resources/

- Measuring Excellence in Extension, ECOP initiative http://excellence.tamu.edu/

- University of Nebraska, Lincoln, Extension impact reports http://www.extension.unl.edu/

- Cornell Cooperative Extension, Evidence based living http://evidencebasedliving.human.cornell.edu/

- University of Missouri, Extension public value resources http://extension.missouri.edu/staff/publicvalue.aspx

- University of Wisconsin, Program development and assessment http://www.uwex.edu/ces/pdande/index.html

Survey Resources

 ෨ Western Extension Marketing Committee, Niche Market Assessment publication http://valueaddedag.org/nichemarkets.html

 ෨ D.A. Dillman (2000). "Mail and Internet Surveys" John Wiley & Sons, Inc. New York

 ෨ Survey Monkey at https://www.surveymonkey.com

 ෨ Harvard University, Tip Sheet on Question Wording http://psr.iq.harvard.edu/book/questionnaire-design-tip-sheet

Thank You

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