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# **Accepting the Program Evaluation Challenge:**

## **Educational Content for Professional Development**

***2008***

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**Developed by the:**

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## **Introduction**

Over the past decade there has been a significant increase in the need to document the results and impacts of Cooperative Extension programming as both funders and the public demand greater accountability. As individual faculty members, program impacts and accountability are also important within the university for individual personnel evaluations, as well as promotion and tenure consideration. Evaluating and communicating the work we do, therefore, is a necessary and important part of everyone's responsibility to themselves, Cooperative Extension, the university and the people of Nevada.

To accomplish our impact and accountability responsibilities, each of us needs to assess our own evaluation skills and find ways to help strengthen our collective ability to meet these evaluation challenges. This report provides the opportunity to assess your evaluation skills, as well as strengthen them through the evaluation framework and resources that are provided. I hope this report will serve as a resource for your evaluation program needs, to help you increase your own capacity to provide quality assessments and evaluations, and to help us as an organization document, recognize and reward our successes in serving the needs of the people of Nevada.



**Karen Hinton,  
Dean and Director,  
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## **Overview and Purpose**

In 2007, a committee of University of Nevada Cooperative Extension (UNCE) faculty was formed to identify program evaluation expertise within University of Nevada, Reno (UNR), ascertain professional development program evaluation topics, and compile resources associated with program evaluation that could be used by UNCE faculty and staff. The overarching charge of the committee was to increase the capacity of UNCE faculty and staff to design and implement quality program evaluations. This publication represents the initial product of the committee and begins with the rationale, definition and assumptions related to program evaluation within UNCE, followed by appendices that contain a general logic model example, the types of program impacts that UNCE programming often attempt to document, a program evaluation competency self-assessment, a framework containing the scope of competencies needed to conduct program evaluations, and essential references and resources related to this topic.

It is critical for UNCE faculty to demonstrate the impact of their programming. This is typically accomplished through program evaluation. Program evaluation should be an integral component of program development. As such, how a program is to be evaluated should be considered in the program planning stage. Appendix A provides a Logic Model for program development and program evaluation that helps to graphically show this relationship. Logic models are increasingly used and endorsed by Cooperative Extension professionals to reveal the linkages between program development activities and evaluation outcomes, and are often the first step in program evaluation planning.

Program evaluations serve multiple purposes: accountability, monitoring of program effectiveness, gleaning new knowledge, faculty performance, and maintaining oversight of staff and compliance with regulations. Program evaluation can be used to justify a program's existence and design, can help validate the resources spent, determine if

needs and educational goals have been met, and to assess if the issues that the program intended to influence have been impacted. There is no single best approach or method to evaluate all programming efforts, just as there is no single best approach to delivering programs.

This diversity of programming purpose results in differing levels of program design, duration and intensity, necessitating unique program evaluation strategies for each program. Appendix B displays the common types of program outcomes relevant to Cooperative Extension programming, including definitions and examples of each. Faculty and staff need to be knowledgeable and creative in designing, implementing and reporting their program evaluation efforts. Furthermore, faculty must be respectful and accepting of the variety of program evaluation approaches when critiquing their peers. Quantitative, qualitative, ethnographic, narrative, economic and other evaluation methods are *equally beneficial* to ascertain program impact when used correctly. Sensitivity to differences in program objectives, target audiences and delivery methods is critical to understanding the appropriateness of the approach used and the results obtained. Finally, if a goal of a program evaluation is dissemination of the evaluation results through publication, then UNR Institutional Research Board (IRB) certification should be sought and obtained.

## **Definitions**

For the purposes of UNCE, which as an organization aspires to “discover, develop, disseminate, preserve and use knowledge to strengthen the social, economic and environmental well-being of people (UNCE, 2008),” program evaluation is tied to the community-based programming that faculty and staff develop and implement. In this context, program evaluation is the measuring of what happened as a result of an intervention or activity, based on pre-established goals and objectives. Although many types of evaluation have been identified in the research base, two are particularly relevant to the educational mission of

UNCE: formative or process evaluation and summative or impact evaluation. Each can significantly contribute to the quality of UNCE programming. *Formative* (process) evaluation examines a program or activity as it develops and can involve pre-testing of materials, and the tracking of the number of program materials, contacts, barriers encountered, and/or curricular and program modifications. The goal of this evaluative process is to make the program more efficient, more relevant, and more likely to accomplish program goals. *Summative* (impact) evaluation assesses program or activity outcomes (changes that occur as a result of the program, without necessarily establishing cause and effect conclusions) and impacts (effectiveness in changing target populations' knowledge/learning, behavior/action or in conditions). Both types of program evaluations require the establishment of measurable goals and objectives, the identification of measurement and sampling strategies, the description of implementation strategies and the outline of reporting tactics.

A growing national trend is to require more measurement and reporting of outcomes/impacts than in the past. This means Cooperative Extension faculty and staff must become increasingly competent in these types of program evaluation in order to compete for program funding and disseminate their program impacts. At the same time, it is acknowledged that the types of program outcomes/impacts important for UNCE programming may not become evident until sometime after the program experience. In addition, UNCE audiences can be highly heterogeneous in terms of age, culture, learning styles, literacy levels and geographic place. For these reasons, community-based program impacts may be more complicated and/or time consuming to assess than in traditional classroom contexts. It is hoped that this document will assist UNCE faculty and staff to better professionally prepare, plan and conduct community-based program evaluations.

## **Underlying Assumptions and Expectations**

Not all UNCE faculty and staff have the education and experience in program evaluation to design and implement quality evaluations for their activities and programming. For this reason, we endorse the professional competency ladder as outlined by Senge (2006) and modified for Cooperative Extension professionals on program evaluation by the National Evaluating for Impact Committee (Arnold, Calvert, Cater, Evans, LeMenestrel, Silliman, & Walahoski, 2008) as a model for UNCE faculty and staff (see Appendices C & D). This modified model divides professional competency into three pertinent levels for UNCE professional development: Novice, Advanced Beginner and Practitioner. The educational content of this paper is organized according to these three competency levels. The full professional competency ladder goes beyond the Practitioner level and includes Mentor and Expert competency levels, which are not addressed in this paper. It is not expected or desirable that all UNCE faculty and staff move beyond practitioner status to become experts in program evaluation. However, through professional development and collaborative learning opportunities, *over time*, it would be expected that staff with data collection and program evaluation responsibilities attain an Advanced Beginner level and that faculty attain Practitioner level program evaluation competency. It is hoped, however, that Mentor (and possibly Expert) level faculty can be identified to help with the professional development and coaching opportunities needed to help faculty and staff attain Advance Beginner and Practitioner competency levels. If mentor faculty are identified for such coaching activities, it is critical they be rewarded and their activities be written into their role statements.

Because of the complexity of community-based program evaluation, collaborative approaches to evaluation, when possible, often result in higher quality and more effective evaluations. This also is often the case in terms of multi-method evaluations, where diverse data-

collection methods within the same evaluation design, can contribute unique information on program effectiveness. Program evaluations need to be congruent to program scope and intensity; greater program resources, higher dosage or intensity levels for participants, and more rigorous program goals require more thorough and complex evaluation designs. For these reasons, we believe program evaluation planning should coincide with the inception of program development, teams of faculty and staff should collaborate on program evaluations when possible, and that no single evaluation type, method or approach can be used for all programs, given the scope and diversity of UNCE educational activities and programming.

## **Program Evaluations, Individual Job Performance Evaluations & Evaluation Targets**

Given the nature of every organization's efforts to evaluate individual job performance, it is important to clarify how the outcomes/impacts of program evaluation might be linked to individual job performance evaluations. Thus, program evaluation results should be reported and reviewed during the annual faculty and staff performance evaluation cycle. It is recognized, however, that important program outcomes/impacts may not be measurable or reportable during a particular annual performance evaluation cycle. Change in knowledge (learning) often can be readily measured in the immediate or short term, but change in behavior may not occur for some time and changes in societal or community conditions may take years. In this case, formative evaluation results and changes in knowledge (learning) may be appropriate to consider in the annual performance evaluation for faculty. At some point, however, it is appropriate to expect a program's outcomes/impacts to be reported in the faculty/staff annual evaluation; in some cases multiple program cycles may be needed to collect the participant numbers required for analysis.

Program outcomes/impacts should be reported in the annual evaluation cycle in which they are available and it would be appropriate to



consider them as a part of that year's job performance evaluation. In addition to such program outcomes/impacts, formative evaluation results, as well as results from properly designed outcome evaluation studies that reveal unexpected findings, can contribute important information on how to improve, modify or discontinue programs. This information is critical to the continued quality and accountability of UNCE educational programming and should be reported on annual evaluations when obtained.

There is no expectation that all UNCE programs be evaluated to the same degree. There would be an expectation, however, that the larger, more resource-intensive and/or ongoing UNCE programs would be appropriate for more focused and/or intensive program evaluation efforts. Given the need to be accountable to both funders and the public we serve, this has become increasingly important.

## **Scope and Content of Program Evaluation Competencies**

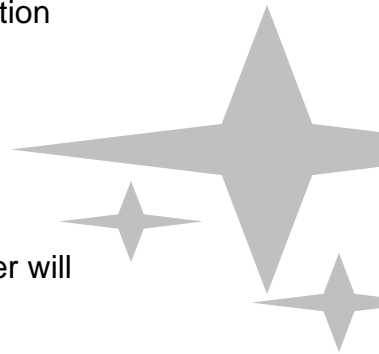
Appendix C provides a self-assessment tool to identify individual program evaluation competency strengths and weaknesses. This assessment corresponds to the Program Evaluation Competency model and educational resources found in Appendix D. Generally, scores mostly in the 1 and 2 range of a competency section on the assessment mean that the individual should seek to raise their competency in that evaluation topic. To aid this, Appendix D is organized in three levels of mastery: *Novice*, *Advanced Beginner* and *Practitioner*, and encompass critical knowledge that UNCE faculty and staff need for successful program evaluation. Individuals at the *Novice* level learn the basics of evaluation; for some this will be a first foray into the subject area. The *Advanced Beginner* level presumes a competency level in which individuals begin to apply their knowledge to real settings, which also provide the opportunity for additional learning. Finally, individuals at the *Practitioner* level should be able to demonstrate evaluation knowledge and skill through independent work.



Competency sections in Appendix D encompass seven program evaluation areas that are important to UNCE program evaluation: Program Planning for Effective Program Evaluation; Focusing an Evaluation; Evaluation Design; Evaluation Methods; Collecting and Handling Data; Analyzing and Interpreting Data; and Communicating Evaluation Results. Each contains a definition of that evaluation area, the scope and content of what individuals should know to attain novice, advanced beginner and practitioner competency levels in program evaluation and specific resources for that area. Appendix E provides additional general Web-based program evaluation resources and Appendix F lists UNR expertise that is available to UNCE faculty and staff regarding program evaluation planning, implementation, data analysis and report development.

## **Conclusion**

We hope the educational materials and resources in this paper will help UNCE faculty and staff to increase their capacity to design and implement quality program evaluations. It has been the committee's intent to bring a greater focus, discussion and appreciation for evaluation of UNCE educational programming. We encourage faculty and staff to take the short, self-assessment found in Appendix C, *Increasing Your Evaluation Capacity: How Do You Rate Yourself?* Results can be used to better understand your strengths and weaknesses on evaluation topics. Appendix D provides the competency guidelines and resources to increase your knowledge and skills in the evaluation areas you rate yourself lower. This self-assessment also can help you identify professional development opportunities which can help you further develop your program evaluation skills. Embracing the program evaluation challenge will help UNCE continue to create relevant, high-quality educational programming for the citizens of Nevada; we hope the evaluation educational content assembled for this paper will assist you in your own professional development.

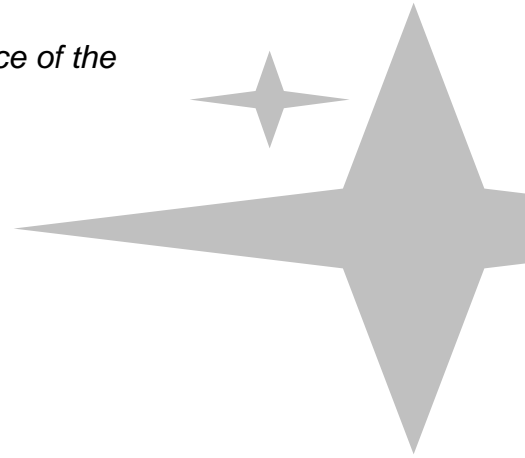


## References

Arnold, M. E., Calvert, M. C., Cater, M., D., Evans, W., LeMenestrel, S., Silliman, B., & Walahoski, J. S. (2008). *Evaluating for Impact: Educational Content for Professional Development*. Washington, DC: National 4-H Learning Priorities Project, Cooperative State Research, Education, & Extension Service, USDA.

University of Nevada Cooperative Extension, (2008). UNCE Mission Statement. Retrieved online September 23, 2008 at <http://www.unce.unr.edu/about/mission/>.

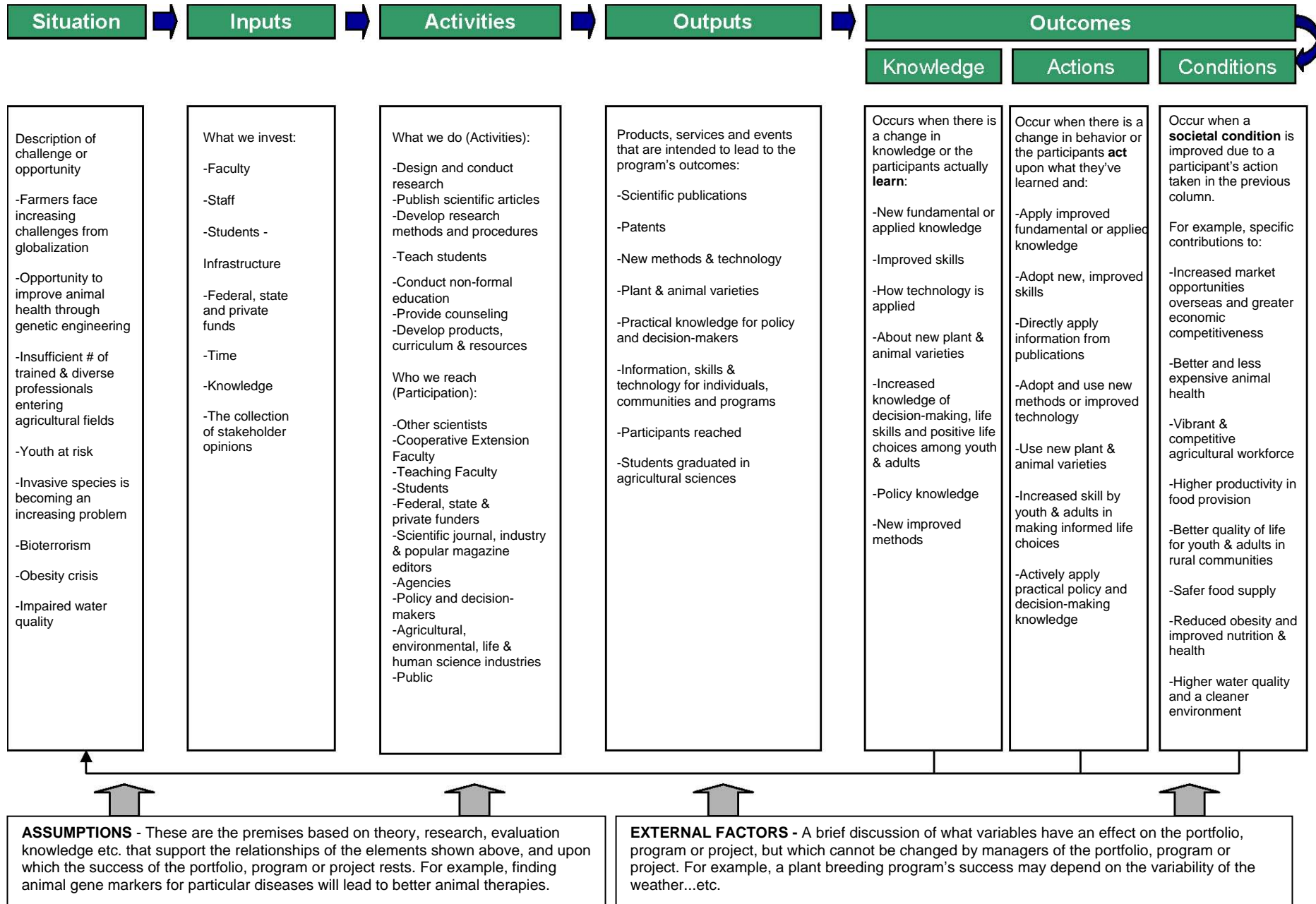
Senge, PM. (2006). *The fifth discipline: The art and practice of the learning organization*. New York, NY: Doubleday.



# Appendix A

## Generic Logic Model for CSREES Reporting

(This model is intended to be an illustrative guide for reporting on CSREES-funded research, education and Cooperative Extension activities. It is not a comprehensive inventory of our programs.)



# Appendix B

## Definitions & Examples of Program Outcomes

**Program Outcomes** - Planned results or changes for individuals, groups, communities, organizations or systems. Types of outcomes include:

	<b>DEFINITION</b>	<b>EXAMPLES</b>
<b>1. Change in Knowledge</b>	Occurs when there is a change in knowledge or the participants actually <b>learn</b> :	<ul style="list-style-type: none"> <li>• New fundamental or applied knowledge</li> <li>• Improved skills</li> <li>• How technology is applied</li> <li>• About new plant &amp; animal varieties</li> <li>• Increased knowledge of decision-making, life skills, and positive life choices among youth &amp; adults</li> <li>• Policy knowledge</li> <li>• New improved methods</li> <li>• Developmental learning activities for young children</li> </ul>
<b>2. Change in Behavior/Action</b>	Occurs when there is a change in behavior or the participant's <b>act</b> upon what they've learned.	<ul style="list-style-type: none"> <li>• Apply improved fundamental or applied knowledge</li> <li>• Adopt new improved skills</li> <li>• Directly apply information from publications</li> <li>• Adopt and use new methods or improved technology</li> <li>• Use new plant &amp; animal varieties</li> <li>• Increased skill by youth &amp; adults in making informed life choices</li> <li>• Actively apply practical policy and decision-making knowledge</li> <li>• Changes in parenting practices</li> </ul>
<b>3. Changes in Condition</b>	Occurs when a <b>societal condition</b> is improved due to a participant's change in action. These are usually changes in Social, Economic, Civic and Environmental conditions. Synonymous with Impact.  Includes changes in conditions as a result of the change in behavior based on knowledge learned.	<ul style="list-style-type: none"> <li>• Dollars saved or dollars increased</li> <li>• Increased market opportunities overseas and greater economic competitiveness</li> <li>• Better and less expensive animal health</li> <li>• Vibrant &amp; competitive agricultural workforce</li> <li>• Higher productivity in food provision</li> <li>• Better quality of life for youth &amp; adults in rural communities</li> <li>• Safer food supply</li> <li>• Reduced obesity and improved nutrition &amp; health</li> <li>• Higher water quality and a cleaner environment</li> <li>• Reduced incidence of child abuse and neglect</li> </ul>

5/29/08 - Taken from CSREES Generic LOGIC Model, [http://www.csrees.usda.gov/about/strat\\_plan\\_logic\\_models.html](http://www.csrees.usda.gov/about/strat_plan_logic_models.html)

## Appendix C\*

### Increasing Your Evaluation Capacity: How Do You Rate Yourself?

This self-assessment can be used to understand your knowledge level of specific areas of program evaluation. Individual responses of this self assessment are not meant to be totaled; rather this should be used as a checklist to determine what your individual level of competency is in relation to a specific evaluation content area. In general, scores of '0' indicate a pre-novice level of competency for that topic; scores of '1' indicate a novice level of competency; scores of '2,' an advanced beginner level; and scores of '3,' a practitioner level. Demonstrated outcomes for each of these competency levels, as well as educational resources for each of the evaluation topic areas contained in this assessment, can be found in Appendix D.

#### How do you rate yourself?

0- I know nothing about this

1- I understand the basic concept - **(novice level)**

2- I can implement this concept with assistance - **(advanced beginner level)**

3- I can implement this concept independently and/or teach it to others - **(practitioner level)**

I. Program Planning for Program Evaluation	I know nothing about this	I understand the basic concept	I can implement this concept with assistance	I can implement this concept independently and/or teach it to others
a. Know the terms or components of a logic model	0	1	2	3
b. Develop a logic model or other theory of change for program planning	0	1	2	3
c. Create evaluations that match a program logic model or program theory	0	1	2	3

II. Focusing an Evaluation	I know nothing about this	I understand the basic concept	I can implement this concept with assistance	I can implement this concept independently and/or teach it to others
a. Determine whether a program is a good candidate for evaluation (interest, resources, expertise, capacity)	0	1	2	3
b. Determine the purpose of evaluation	0	1	2	3

(stakeholders, audience, etc)				
c. Know when to use different types of evaluation (process, outcome, etc.)	0	1	2	3
d. Develop evaluation questions from a logic model	0	1	2	3
e. Develop an evaluation plan (indicators, data sources, etc.)	0	1	2	3
f. Manage an evaluation (conduct, budget, create timeline, monitor, critique)	0	1	2	3

<b>III. Evaluation Questions and Designs</b>	<b>I know nothing about this</b>	<b>I understand the basic concept</b>	<b>I can implement this concept with assistance</b>	<b>I can implement this concept independently and/or teach it to others</b>
a. Develop evaluation questions that match the goals of the evaluation	0	1	2	3
b. Match evaluation questions to levels of logic model (inputs, outputs, outcomes)	0	1	2	3
c. Define and distinguish indicators for success	0	1	2	3
d. Generate appropriate evaluation questions based on audience, culture, program context, purpose, stakeholders	0	1	2	3
e. Knows different types of evaluation designs (pre-post, longitudinal, retrospective)	0	1	2	3
f. Match evaluation design to evaluation questions (what needs to be known)	0	1	2	3
g. Adapt designs to limitations (funding, time, resources, expertise)	0	1	2	3

<b>IV. Evaluation Methods</b>	<b>I know nothing about this</b>	<b>I understand the basic concept</b>	<b>I can implement this concept with assistance</b>	<b>I can implement this concept independently and/or teach it to others</b>
a. Understand when to use qualitative method	0	1	2	3

b. Understand when to use quantitative method	0	1	2	3
c. Describe the strengths and limitations of different qualitative methods	0	1	2	3
d. Describe the strengths and limitations of different quantitative methods	0	1	2	3
e. Apply appropriate methods to answer evaluation questions	0	1	2	3
f. Develop survey questions	0	1	2	3
g. Develop protocols for focus groups and interviews	0	1	2	3
h. Develop observation protocol	0	1	2	3
i. Write methods section for evaluation report and IRB	0	1	2	3

<b>V. Collecting and Handling Data</b>	<b>I know nothing about this</b>	<b>I understand the basic concept</b>	<b>I can implement this concept with assistance</b>	<b>I can implement this concept independently and/or teach it to others</b>
a. Understand institutional requirements for collecting data with human subjects (IRB)	0	1	2	3
b. Conduct focus groups and interviews	0	1	2	3
c. Understand strategies for effective data collection (consent, timing, facilitation, setting, nondisruptive, working with special populations)	0	1	2	3
d. Process, handle and store data (working with data sets, creating data code books, transcripts)	0	1	2	3
e. Critique tools and instruments (for reliability and validity)	0	1	2	3
f. Use technology (Web-based surveys, photo techniques)	0	1	2	3

<b>VI. Analyzing and Interpreting Data</b>	<b>I know nothing about this</b>	<b>I understand the basic concept</b>	<b>I can implement this concept with assistance</b>	<b>I can implement this concept independently and/or teach it to others</b>
a. Understand basic concepts in analyzing	0	1	2	3



and interpreting qualitative data (e.g. triangulation, member checks)				
b. Select and apply descriptive statistics (e.g. frequencies, means, standard deviation, range)	0	1	2	3
c. Understand assumptions, properties and limitations of inferential statistics (e.g. parametric/non-parametric data, data diagnostics)	0	1	2	3
d. Select and conduct appropriate procedures for data analysis (includes qualitative and quantitative software packages)	0	1	2	3
e. Interpret findings and construct conclusions	0	1	2	3
f. Identify limitations of results	0	1	2	3

<b>VII. Communicating Evaluation Results</b>	<b>I know nothing about this</b>	<b>I understand the basic concept</b>	<b>I can implement this concept with assistance</b>	<b>I can implement this concept independently and/or teach it to others</b>
a. Match content of evaluation report to audience needs	0	1	2	3
b. Know standard content of evaluation reports	0	1	2	3
c. Develop different types of evaluation reports (full report, executive summary, impact statement/success story, marketing materials, media strategies, scholarly dissemination)	0	1	2	3
d. Develop program recommendations and commendations	0	1	2	3

\*This assessment was adapted from: Arnold, M. E., Calvert, M. C., Cater, M., D., Evans, W., LeMenestrel, S., Silliman, B., & Walahoski, J. S. (2008). *Evaluating for Impact: Educational Content for Professional Development*. Washington, DC: National 4-H Learning Priorities Project, Cooperative State Research, Education, & Extension Service, USDA

# Appendix D\*

## Competency 1: Program Planning for Effective Program Evaluation

The first competency area involves understanding and using program development logic models to plan and implement programs. Particular emphasis is placed on identifying short-, medium- and long-term outcomes and their importance in setting the stage for effective evaluation of the program. At this level, individuals also learn to identify other areas of a logic model that can also provide important evaluation information.

**Novice Level:** Individuals are familiar with terminology and reasoning of one or more logic models.

### *Demonstrated Competencies:*

- Define and give examples of each level of the Targeting Outcomes of Programs (TOP) model or UWEX Logic Model.
- Explain logic model steps used in an established program (e.g., talk through a planned program)
- Describe the role of the logic model in the larger process of program development (e.g., note context of assessment, implementation, evaluation)
- Explain role and significance of program evaluation standards of utility, feasibility, propriety, and accuracy
- Explain the role and importance of ethics in evaluation
- Describe how to use results of evaluation to modify or extend a planned program (e.g., criteria, processes)
- Explain the role of reassessment in the process of evaluation and reprogramming

**Advanced Beginner Level:** Individuals are skilled in generating, explaining and assessing the results of a logic model.

### *Demonstrated Competencies:*

- Develop a small-scale logic model (with assistance)
- Explain program/logic model to immediate stakeholders (e.g., those directly involved in the program).
- Explain role of program/logic model in the larger county (state) plan-of-work (in the case of integrated programming, link a specific program to larger goals)
- Explain subtopics of evaluation standards of utility, feasibility, propriety, and accuracy, with examples related to logic model for program
- Explain lessons learned after completing sample program evaluation and interpret changes in program or evaluation to immediate stakeholders

\*Adapted from: Arnold, M. E., Calvert, M. C., Cater, M., D., Evans, W., LeMenestrel, S., Silliman, B., & Walahoski, J. S. (2008). *Evaluating for Impact: Educational Content for Professional Development*. Washington, DC: National 4-H Learning Priorities Project, Cooperative State Research, Education, & Extension Service, USDA.

**Practitioner Level:** Individuals are skilled in interpreting a logic model and engaging stakeholders in using the model to improve programs.

*Demonstrated Competencies:*

- Guide a stakeholder group in development of a logic model for a program
- Explain program and logic model to a broad group of stakeholders
- Lead or contribute to development of a logic model (POW, integrated program) for a larger system
- Explain (at planning and/or reassessment) the link between specific program outcomes and strategies used to accomplish those outcomes
- Explain the relevance and importance of standards for a specific program logic model, with examples from practice
- Explain the relevance and importance of standards for a specific program logic model, with examples from practice
- Explain specific processes and products of a program evident in the evaluation of a specific program.

**Resources to assist with this competency area:**

American Evaluation Association. (2008). Guiding Principles for Evaluators. Retrieved June 9, 2008 from <http://www.eval.org/Publications/GuidingPrinciplesPrintable.asp>

Boone, E.J., Safrit, R.D., & Jones, J. (2002). *Developing programs in adult education: A conceptual programming model* (2nd ed.). Evanston, IL: Waveland Press.

Centers for Disease Control, Evaluation Working Group. (2005). Retrieved June 9, 2008 from <http://www.cdc.gov/eval/standard.htm>

Douglah, M. (1998). *Developing a concept of Extension program evaluation*. Retrieved January 4, 2008 from <http://learningstore.uwex.edu/pdf/G3658-7.PDF>

Edna McConnell Clark Foundation. (2006). *Evaluating your organizational capacity: A self-assessment tool*. Retrieved Jun 9, 2008 from <http://www.emcf.org/pub/readingroom/mckinseysselfassessment.htm>

Ohio State Extension. (2008). *Successful Assessment Methods and Measurement In Evaluation (SAMMIE)*. Retrieved January 4, 2008 from <http://sammie.osu.edu/>

Ramlow, M. E. (2007). *Program Evaluation Standards*. Retrieved December 27, 2007 from [www.eval.org/EvaluationDocuments/progeval.html](http://www.eval.org/EvaluationDocuments/progeval.html)

Rockwell, K., & Bennett, C. (2008). *Hierarchy for Targeting Outcomes and Evaluating their Achievement (TOP)*. Retrieved January 4, 2008 from <http://citnews.unl.edu/TOP/english/>

Stufflebeam, D.L. (2002). The CIPP model checklist. Retrieved January 4, 2008 from <http://www.wmich.edu/evalctr/checklists/checklistmenu.htm#models>

University of Wisconsin Extension - UWEX. (2008). *Program Development*. Retrieved January 4, 2008 from [www.uwex.edu/ces/pdande/progdev/index.html](http://www.uwex.edu/ces/pdande/progdev/index.html)

University of Wisconsin Extension - UWEX. (2008). *Logic Model Evaluation*. Retrieved January 4, 2008 from [www.uwex.edu/ces/pdande/evaluation/evallogicmodel.html](http://www.uwex.edu/ces/pdande/evaluation/evallogicmodel.html)

W. K. Kellogg Foundation. (1998). *W. K. Kellogg Foundation Evaluation Handbook*. Retrieved from <http://www.ojp.usdoj.gov/BJA/evaluation/links/WK-Kellogg-Foundation.pdf>

## Competency 2: Focusing an Evaluation

When faced with conducting a program evaluation many people are not sure how to begin. Often times, this uncertainty results in an evaluation that has not been sufficiently planned and focused. Careful evaluation planning is directly connected to the quality of the evaluation results and is a critical first step in the evaluation process. This competency area covers the different purposes and types of program evaluation. A special emphasis is placed on developing evaluation questions that are linked to the program's theory or framework. Developing indicators and identifying data sources is also critical at this phase. Developing and following an evaluation protocol, timeline and project management plan also is important.

**Novice Level:** Learner understands the elements of planning and focusing an evaluation

*Demonstrated Competencies:*

- The purposes of evaluation
- Process and outcome evaluation
- Developing evaluation questions
- Identifying indicators of change
- Identifying data sources
- Managing an evaluation

**Advanced Beginner Level:** Should be able to create and use an evaluation plan to carry out an evaluation

*Demonstrated Competencies:*

- Create and evaluation plan
- Conduct the program evaluation

- Monitoring of the evaluation
- Evaluation of the evaluation

**Practitioner Level:** Should be able to demonstrate skill in planning and implementing a program evaluation.

*Demonstrated Competencies:*

- Plan and conduct a complete evaluation with minimal guidance.

**Resources to assist with this competency area:**

Baumberger, M., Rugh, J., & Mabry, L. (2006). First Clarify the Purpose: Scoping the Evaluation. *Real world evaluation*. Thousand Oaks, CA: Sage.

Davidson, E. J. (2005). What is Evaluation, Defining the Purpose of the Evaluation, Identifying Evaluation Criteria, Organizing the Criteria and Identifying Potential Sources of Evidence. In *Evaluation methodology basics: The nuts and bolts of sound evaluation*. Thousand Oaks, CA: Sage.

Henderson, K. A., & Bialeschki, M. D. (2002). *Evaluating leisure services: making enlightened decisions*. State College, PA: Venture Publishing.

McLaughlin, J. A., & Jordan, G. B. (2004). Using Logic Models. In J. S Wholey, H. P. Hatry, and K. E. Newcomb (Eds.) *Handbook of practical program evaluation* (2<sup>nd</sup> Ed.). San Francisco, CA: Jossey Bass.

Mertens, D. M. (2005). Evaluation. In *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (2<sup>nd</sup> Ed.). Thousand Oaks, CA: Sage.

Patton, M. Q. (1997). Focusing Evaluations: Choices, Options, and Decisions. In *Utilization-focused evaluation: The new century text* (3<sup>rd</sup> Ed.). Thousand Oaks, CA: Sage.

Preskill, H., & Russ-Eft, D. (2005). Focusing the Evaluation. In *Building evaluation capacity: 72 activities for teaching and training*. Thousand Oaks, CA: Sage.

Rossi, P. H., Lipsey, M. W., & Freeman, H. E. (2004). Identifying Issues and Formulating Questions, An Overview of Program Evaluation, Tailoring Evaluations. In *Evaluation: A systematic approach* (7<sup>th</sup> Ed.). Thousand Oaks, CA: Sage.

Stecher, B. M., & Davis, W. A. (1987). Thinking about the focusing process, Thinking about client concerns and evaluation approaches, How to formulate an evaluation plan. In *How to focus a program evaluation*. Thousand Oaks, CA: Sage.

Taylor-Powell, E., Steele, S., & Douglah, M. (1996). *Planning a program evaluation*. Madison, WI: University of Wisconsin Cooperative Extension Publication G3658-1.

Walker, R., & Wiseman, M. (2006). Managing Evaluations. In I. F. Shaw, J. C. Greene, and M. M. Mark (Eds.) *The Sage handbook of evaluation* (pp. 360-383). Thousand Oaks, CA: Sage.

Western Michigan University Program Evaluation Center (n.d.). *The Program Evaluation Standards*. Retrieved September 8, 2008 from <http://www.wmich.edu/evalctr/jc/PGMSTNDS-SUM.htm>

University of Wisconsin Extension. (2008). Logic Model Evaluation. Retrieved January 4, 2008 from [www.uwex.edu/ces/pdande/evaluation/evallogicmodel.html](http://www.uwex.edu/ces/pdande/evaluation/evallogicmodel.html)

### Competency 3: Evaluation Design

Evaluations are only as good as the questions that drive them, so developing effective questions and strategies for each level of impact is a critical skill in program development. This competency section focuses on evaluation questions appropriate to quantitative and qualitative methods and their relation to outcome indicators and results. A special emphasis is placed on types of evaluation questions, and matching questions to indicators and outcomes. Learning the terminology and types of questions that can be used in evaluation is important. Advanced Beginners are encouraged to work with a mentor or team to develop viable questions for real programs and understand the logical links between outcome goals and questioning strategies.

**Novice Level:** Individuals are familiar with key concepts of design: evaluation questions and indicators, timelines.

*Demonstrated Competencies:*

- Should be able to explain types of evaluation questions -- open-ended, close-ended -- content, process
- Distinguish between short-, mid-, and long-term outcome questions
- Define and distinguish indicators
- Know several quantitative and qualitative methods
- Explain and follow an external timeline

**Advanced Beginner Level:** Have developed skills in generating, explaining and assessing questions and indicators and be able to match them to appropriate evaluation methods.

*Demonstrated Competencies:*

- Able to generate evaluation questions
- Able to link indicators to framework stages
- Select and use at least one quantitative and one qualitative indicator in consultation with mentor
- Explain and follow external timeline

**Practitioner Level:** Skilled in preparing questions and evaluation methods to effectively assess and improve programs.

*Demonstrated Competencies:*

- Able to generate and edit questions on own, based on program objectives
- Able to adapt questions to audience and methods
- Able to link appropriate indicators to program outputs and outcomes
- Able to select and use more than one method on own
- Able to adjust or augment to changes in plan or program

**Resources to assist with this competency area:**

Bamberger, M., Rugh, J., & Mabry, L. (2006). *Real world evaluation*. Thousand Oaks, CA: Sage.

Bradburn, N., Sudman, S., & Wansink, B. (2004). *Asking questions*. San Francisco, CA: Jossey-Bass.

Department of Agricultural and Extension Education. (2008). *AEE 577 Evaluation in Agricultural and Extension Education, Class II: Approaches and Models of Evaluation..* Retrieved January 4, 2008 from [www.cals.ncsu.edu/agexed/aee577/Class%20II/aee577class2.html](http://www.cals.ncsu.edu/agexed/aee577/Class%20II/aee577class2.html)

CYFERNet. (2008). *Evaluation: Evaluating Outcomes for Early Childhood, School-age, and Teens*. Retrieved August 27, 2008 at [http://cyfernet.ces.ncsu.edu/cyfres/browse\\_2.php?search=Evaluation](http://cyfernet.ces.ncsu.edu/cyfres/browse_2.php?search=Evaluation)

CYFERNet (2008). *Evaluation: Evaluation Design and Methods*. Retrieved August 27, 2008 at: [http://cyfernet.ces.ncsu.edu/cyfres/browse\\_3.php?cat\\_id=610&category\\_name=Evaluation+Design+and+Methods&search=Evaluation&subcat=Designing+a+Program+Evaluation&search\\_type=browse](http://cyfernet.ces.ncsu.edu/cyfres/browse_3.php?cat_id=610&category_name=Evaluation+Design+and+Methods&search=Evaluation&subcat=Designing+a+Program+Evaluation&search_type=browse)

Douglah, M. (1998). *Developing a concept of Extension program evaluation*. Retrieved January 4, 2008 from <http://learningstore.uwex.edu/pdf/G3658-7.PDF>

- Durfee, W., & Chase, T. (2003). *Brief tutorial on Gantt charts*. Retrieved August 27, 2008 at <http://www.me.umn.edu/courses/me4054/assignments/gantt.html>
- Earthman, E., Richmond, L. S., Peterson, D. J., Marczek, M. S., & Betts, S. C. (1999). *Adapting evaluation measures to hard to reach audiences*. Retrieved August 27, 2008 at <http://ag.arizona.edu/fcs/cyfernet/evaluation/adapeval.pdf>
- Hewitt, B. (2007). *Business with CSREES, FY 2007-2011 POW Planning. Module 3: The Planned Programs Section*. Retrieved August 27, 2008 at [www.csrees.usda.gov/business/reporting/planrept/training\\_fy0711.html](http://www.csrees.usda.gov/business/reporting/planrept/training_fy0711.html)
- Ohio State Extension. (2008). *Successful Assessment Methods and Measurement In Evaluation (SAMMIE)*. Retrieved January 4, 2008 from <http://sammie.osu.edu/>
- Rockwell, K., & Bennett, C. (1995). *Targeting outcomes of programs*. Retrieved August 27, 2008 at <http://citnews.unl.edu/TOP/index.html>
- Rockwell, K., & Bennett, C. (2008). *Hierarchy for Targeting Ooutcomes and Evaluating their Acheivement*. Retrieved January 4, 2008 from <http://citnews.unl.edu/TOP/english/>
- Silliman, B. (2007). *Critical indicators of youth development outcomes*. Retrieved December 27, 2007 from [www.national4-headquarters.gov/library/Indicators\\_4H\\_MM.pdf](http://www.national4-headquarters.gov/library/Indicators_4H_MM.pdf)
- Stufflebeam, D.L. (2002). *The CIPP model checklist*. Retrieved January 4, 2008 from [www.wmich.edu/evalctr/checklists/cippchecklist.htm#process](http://www.wmich.edu/evalctr/checklists/cippchecklist.htm#process)
- United Way. (2008) *Outcome measurement resource network*. Retrieved January 7, 2008 from <http://national.unitedway.org/outcomes/resources/mpo/examples.cfm>
- University of Arizona. (2007). *Beyond Basics: Evaluating Community-based Programs. Module II: Selected Design Concepts*. Retrieved August 27, 2008 at <http://ag.arizona.edu/fcs/cyfernet/cyfar/PartsFrameset.htm>
- University of Wisconsin Extension. (2008). *Logic Model Evaluation*. Retrieved January 4, 2008 from [www.uwex.edu/ces/pdande/evaluation/evallogicmodel.html](http://www.uwex.edu/ces/pdande/evaluation/evallogicmodel.html)
- University of Wisconsin Extension. (2008). *Program Development*. Retrieved January 4, 2008 from [www.uwex.edu/ces/pdande/progdev/index.html](http://www.uwex.edu/ces/pdande/progdev/index.html)
- W. K. Kellogg Foundation. (2008). *Evaluation Questions*. Retrieved August 27, 2008 at <http://www.wkkf.org/Default.aspx?tabid=90&CID=281&ItemID=2810011&NID=2820011&LanguageID=0>



## Competency 4: Evaluation Methods

This competency involves gaining knowledge of specific methods often used in evaluations. Individuals know about quantitative and qualitative methods and their appropriate use.

### Novice Level

*Demonstrated Competencies:*

- Able to explain the difference between qualitative and quantitative methods.
- Able to identify appropriate qualitative methods for evaluation
- Able to identify appropriate quantitative methods for evaluation
- Able to learn the difference between inferential and descriptive statistics.

### Advanced Beginner Level

*Demonstrated Competencies:*

- Knows the relationship between evaluation questions and evaluation methods.
- Can apply appropriate methods to specific evaluation questions.
- Knows basic descriptive statistics (e.g., means, median, mode, range, SD, etc.)

### Practitioner Level

*Demonstrated Competencies:*

- Able to choose and use appropriate methods for evaluation question.
- Able to apply appropriate methods to specific evaluation questions.
- Knows basic inferential statistics (e.g., t-tests, one-way ANOVA, etc.)

### **Resources to assist with this competency area:**

American Psychological Association. (2001). *Publication Manual of the American Psychological Association* (5<sup>th</sup> Ed.). Washington, DC: Author.

Baugh, E. & Guion, L.A. (2006). Using culturally sensitive methodologies when researching diverse cultures. *Journal of Multi-disciplinary Evaluation*, 4. Retrieved from [http://evaluation.wmich.edu/jmde/JMDE\\_Num004.html](http://evaluation.wmich.edu/jmde/JMDE_Num004.html)

Baumberger, M., Rugh, J., & Mabry, L. (2006). *Real world evaluation*. Thousand Oaks, CA: Sage.

Bouffard, S., & Little, P. (2004, August). *Detangling data collection: Methods for gathering data*. Cambridge, MA: Harvard Family Research Project, Harvard University.

- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed-method approaches* (2<sup>nd</sup> Ed.). Thousand Oaks, CA: Sage Publications.
- Cohen, C. (2006). Evaluation learning circles: A sole proprietor's evaluation capacity-building strategy. *New Directions in Evaluation*, 111, 85-93.
- Diem, K. (2002). Using research methods to evaluate your extension program. *Journal of Extension*, 40(6). Retrieved from <http://www.joe.org/joe/2002december/a1.shtml>
- Fitzpatrick, J., Sanders, J. & Worthen, B. (2003). *Program Evaluation: Alternative Approaches and Practical Guidelines* (3<sup>rd</sup> Ed.). New York: Allyn & Bacon.
- Greene, J., & Caracelli, V. J. (1997). Advances in Mixed-Method Evaluation: The Challenges and Benefits of Integrating Diverse Paradigms. *New Directions for Evaluation*, 74.
- Henderson, K. A. (2006). *Dimensions of choice: Qualitative approaches to parks, recreation, sport, and leisure research*. State College, PA: Venture Publishing.
- Henderson, K. A., & Bialeschki, M. D. (2002). *Evaluating leisure services: Making enlightened decisions*. State College, PA: Venture Publishing.
- Kane, M. & Trochim, W. M. K. (2006). *Concept Mapping for Planning and Evaluation*. Thousand Oaks, CA: Sage Publications.
- Ohio State Extension. (2008). Successful Assessment Methods and Measurement In Evaluation (SAMMIE). Retrieved January 4, 2008 from <http://sammie.osu.edu/>
- Patton, M. Q. (2001). *Qualitative research and evaluation methods*, (3<sup>rd</sup> Ed.). Thousand Oaks, CA: Sage Publications.
- Patton, M. Q. (1987). An Introduction to Qualitative Methods, When to Use Qualitative Methods. In *How to use qualitative methods in evaluation*. Newbury Park, CA: Sage Publications.
- Preskill, H., & Russ-Eft, D. (2005). *Building evaluation capacity: 72 activities for teaching and training*. Thousand Oaks, CA: Sage Publications.
- Purdue University Writing Lab. (n.d.). *Sample research report*. Retrieved from: [http://owl.english.purdue.edu/media/pdf/20070515024844\\_669.pdf](http://owl.english.purdue.edu/media/pdf/20070515024844_669.pdf)
- Purdue University Writing Lab. (n.d.). *Writing your research project report*. Retrieved from: <http://owl.english.purdue.edu/handouts/WAC/CDFS/powerpoint/researchprojectreport.ppt#256>
- Stecher, B. M., & Davis, W. A. (1987). *How to focus an evaluation*. Newbury Park, CA: Sage Publications.

W.K. Kellogg Foundation. (1998). *W. K. Kellogg Foundation Evaluation Handbook*. Retrieved from <http://www.ojp.usdoj.gov/BJA/evaluation/links/WK-Kellogg-Foundation.pdf>

## **Competency 5: Collecting and Handling Data**

This competency focuses on understanding how to collect and manage quantitative and qualitative data. Topics include the ethics and procedures for the collection, storage and processing of data; developing a quantitative data set; data collection methods; developing a data collection methods protocol; and matching data collection methods to evaluation questions.

### **Novice Level**

*Demonstrated Competencies:*

- Knows ethics of data collection, processing and storage.
- Knows different data collection methods.
- Knows about processing and handling quantitative and qualitative data.
- Knows about processing and handling quantitative and qualitative data.
- Knows about the standard parts of a written methods section for an evaluation report or article

### **Advanced Beginner Level**

*Demonstrated Competencies:*

- Has gained skills in preparing IRB packages.
- Can match data collection methods to different evaluation questions.
- Can apply the proper procedures for handling data using a mock data set.
- Can apply what they have learned about writing methods sections for evaluation reports or articles.

### **Practitioner Level**

*Demonstrated Competencies:*

- Can apply skills in preparing IRB packages to real study.
- Can apply knowledge of data collection methods to the creation of a simple data collection tool.
- Can critique other existing data collection tools.
- Can apply the proper procedures for handling data using a real data set.
- Can apply knowledge of how to write an evaluation report.

### **Resources to assist with this competency area:**

- American Evaluation Association. (2004). *Guiding Principles of Evaluators*. Fairhaven, MA: Author. Retrieved from <http://www.eval.org/Publications/GuidingPrinciples.asp>
- American Evaluation Association. (2004). *Guiding Principles Training*. Fairhaven, MA: Author. Retrieved from <http://www.eval.org/GPTraining/GPTrainingOverview.asp>
- American Psychological Association. (2001). *Publication Manual of the American Psychological Association* (5<sup>th</sup> Ed.). Washington, DC: Author.
- Bamberger, M., Rugh, J., & Mabry, L. (2006). *Real world evaluation: Working under budget, time, data, and political constraints*. Thousand Oaks: Sage Publications.
- Betts, S. C., Peterson, D. J., & McDonald, D. A. (2005). More tips: What if a Cooperative Extension professional must work with two or more Institutional Review Boards? *Journal of Extension*, 43(4). Retrieved from <http://www.joe.org/joe/2005august/tt1.shtml>
- Bouffard, S., & Little, P. (2004). *Detangling Data Collection: Methods for Gathering Data*. Cambridge, MA: Harvard Family Research Project. Retrieved from <http://www.gse.harvard.edu/hfrp/content/projects/afterschool/resources/snapshot5.pdf>
- Brown, R., Martin, S., & Weigel, D. (2004). What Cooperative Extension professionals need to know about institutional review boards: Recruiting participants. *Journal of Extension*, 42(6). Available at: <http://www.joe.org/joe/2004december/tt1.shtml>
- Conrad, F., & Schober, M. (2007). *Envisioning the survey interview of the future*. New York: John Wiley & Sons, Inc.
- Cooksy, L. (2005). The complexity of the IRB process: Some of the things you wanted to know about IRBs but were afraid to ask. *American Journal of Evaluation*, 26(3), 352-361.
- Dillman, D. A. (2007). *Mail and Internet surveys: The tailored design method* (2<sup>nd</sup> Ed.). New York: John Wiley & Sons, Inc.
- Fink, A. (2002). *How to Manage, Analyze, and Interpret Survey Data* (2<sup>nd</sup> Ed.). Thousand Oaks: Sage Publications.
- Fowler, F. J. (1995). *Improving survey questions: Design and evaluation*. Thousand Oaks: Sage Publications.
- Hillier, A. (2008). Childhood overweight and the built environment: Making technology part of the solution rather than part of the problem. *The ANNALS of the American Academy of Political and Social Science*, 615(1), 56-82.

- Howell, J., Miller, P., Park, H., Sattler, D., Schack, T., Sperry, E., Widhalm, S., & Palmquist, M. (2005). *Reliability and validity*. Writing@CSU. Colorado State University Department of English. Retrieved June 25, 2008 from <http://writing.colostate.edu/guides/research/relval/>
- Litwin, M. (1995). *How to Measure Survey Reliability and Validity (Survey Kit, Vol 7)*. Thousand Oaks: Sage Publications.
- Leahy, J. (2004). *Using Excel for Analyzing Survey Questionnaires*. University of Wisconsin Extension Publication G3658-14. Retrieved from: <http://learningstore.uwex.edu/pdf/G3658-14.pdf>
- Lopez, M. (2002). *Youth vote national youth survey June 2002 data codebook*. Retrieved from: [http://www.civicyouth.org/PopUps/youthvote\\_national\\_survey\\_june\\_2002\\_codebook.pdf](http://www.civicyouth.org/PopUps/youthvote_national_survey_june_2002_codebook.pdf)
- Martin, S., Weigel, D., & Brown, R. (2005). What Cooperative Extension professionals need to know about institutional review boards: Obtaining consent. *Journal of Extension*, 43(2), Article 2TOT1. Retrieved from <http://www.joe.org/joe/2005april/tt1.shtml>
- McDonald, D. A., Peterson, D. J., & Betts, S. C. (2005). More tips: What if a Cooperative Extension professional must work with Native American Institutional Review Boards? *Journal of Extension*, 43(5). Retrieved from <http://www.joe.org/joe/2005october/tt1.shtml>
- Morgan, D. L., & Krueger, R. A. *The Focus group kit*. (1998). Thousand Oaks: Sage Publications.
- National Cancer Institute. *Human Participant Protections Education for Research Teams*. Retrieved from <http://cme.cancer.gov/c01/resources.php?file=%2F2%2Fmodules%2Fmodule06%2Eswf>
- National Cancer Institute. *Human Participants Protection Training*. Retrieved from <http://cme.cancer.gov/clinicaltrials/learning/humanparticipant-protections.asp>
- National Institute of Health. Office of Human Subjects Research: <http://ohsr.od.nih.gov:16080/info/>
- National Network of Libraries of Medicine. (2006). *Outreach activity data collection form*. Bethesda, MD: Author. Retrieved from: <http://nnlm.gov/evaluation/tools/ActivityInfo.pdf>
- Newman, D. L., & Brown, R. D. (1996). *Applied ethics for program evaluation*. Thousand Oaks: Sage Publications.

- North Carolina State University. (n.d.). Research with experimental subjects. Raleigh, NC: Author. Retrieved from: <http://www.ncsu.edu/sparcs/tutorial/intro.php>
- Ohio State Extension. (2008). *Successful Assessment Methods and Measurement In Evaluation (SAMMIE)*. Retrieved January 4, 2008 from <http://sammie.osu.edu/>
- O'Reilly, J., Hubbard, M., Lessler, J., Biemer, P., & Turner, C., (1994). Audio and video computer assisted self-interviewing: Preliminary tests of new technologies for data collection. *Journal of Official Statistics*, 10(2), 197-214.
- Patton, M. (2001). *Qualitative research and evaluation methods*, (3<sup>rd</sup> Ed.). Thousand Oaks: Sage Publications.
- Peterson, D. J., McDonald, D. A., & Betts, S. C. (2005). More tips: Communicating with Institutional Review Boards over the course of your project. *Journal of Extension*, 43(6). Retrieved from <http://www.joe.org/joe/2005december/tt1.shtml>
- Preskill, H., & Russ-Eft, D. (2005). *Building evaluation capacity: 72 activities for teaching and training*. Thousand Oaks, CA: Sage Publications.
- Richards, L. (2005). *Handling qualitative data*. Thousand Oaks, CA: Sage Publications.
- Rubin, H., & Rubin, I. (2005). *Qualitative interviewing: The art of hearing data*. Thousand Oaks, CA: Sage Publications.
- Russ-Eft, D. F. (1980). *Validity and reliability in survey research* (Technical Report #15). Palo Alto, CA: Statistical Analysis Group in Education, American Institutes for Research in the Behavioral Sciences. (ERIC Document Reproduction Service No. ED279726).
- Trochim, W. K. *Research Methods Knowledge Base: Data Preparation*. Retrieved from <http://www.socialresearchmethods.net/kb/statprep.php>
- Trochim, W. K. *Research Methods Knowledge Base: Construct Validity*. Retrieved from <http://www.socialresearchmethods.net/kb/constval.php>
- Trochim, W. K. *Research Methods Knowledge Base: Reliability*. Retrieved from <http://www.socialresearchmethods.net/kb/reliable.php>
- W.K. Kellogg Foundation *Evaluation Toolkit: Data Analysis* (includes 2 case studies) Retrieved from <http://wkkf.org/Default.aspx?tabid=90&CID=281&ItemID=2810017&NID=2820017&LanguageID=0>
- Wholey, J. S.; Hatry, H. P. & Newcomer, K. E. (2004). *Handbook of practical program evaluation* (2<sup>nd</sup> Ed.). San Francisco: Jossey-Bass.
- Weigel, D., Brown, R., & Martin, S. (2004). What Cooperative Extension professionals need to know about institutional review boards. *Journal of Extension*, 42(5). Retrieved from <http://www.joe.org/joe/2004october/tt1.shtml>

Weigel, D., Martin, S., & Brown, R. (2005). What Cooperative Extension professionals need to know about institutional review boards: Risks and benefits. *Journal of Extension*, 43(1) Article 1TOT1. Retrieved from <http://www.joe.org/joe/2005february/tt1.shtml>

University of Wisconsin Extension Publication G3658-12 *Analyzing Qualitative Data*  
<http://learningstore.uwex.edu/pdf/G3658-12.PDF>

University of Wisconsin Extension Publication G3658-06 *Analyzing Quantitative Data*  
<http://learningstore.uwex.edu/pdf/G3658-6.pdf>

## **Competency 6: Analyzing and Interpreting Data**

This competency area covers basic analysis procedures available for both quantitative and qualitative data. Using statistical software (such as SPSS) individuals know how to perform descriptive and inferential analyses and know how to interpret the results.

### **Novice Level:**

*Demonstrated Competencies:*

- Can identify appropriate procedures for analyzing data
- Understands basic findings and can explain them to stakeholders

### **Advanced Beginner Level:**

*Demonstrated Competencies:*

- With guidance can apply appropriate procedures to conduct data analysis
- With guidance, can interpret findings, construct conclusions, and develop formal methods to communicate them

**Practitioner Level:** Individuals are skilled in analyzing quantitative and qualitative data and at interpreting findings and articulating reasonable conclusions.

*Demonstrated Competencies:*

- Selects and conducts appropriate analysis procedures to program data
- Can appropriately interpret findings and develop conclusions from analysis of program data

### **Resources to assist with this competency area:**

*Beyond Basics: Evaluating Community-Based Programs Training Curriculum*

<http://ag.arizona.edu/fcs/cyfernet/cyfar/index5.htm>

Callor, S., Betts, S. C., Carter, R., Marczak, M., Peterson, D., & Richmond, L. S. (2000). *Children, Youth, and Families at Risk Community-Based Project Evaluation Guide*. Tucson, AZ: University of Arizona Institute for Children, Youth and Families. Retrieved from [http://ag.arizona.edu/fcs/cyfernet/cyfar/stst\\_guide.pdf](http://ag.arizona.edu/fcs/cyfernet/cyfar/stst_guide.pdf)

Fitzpatrick, J. L., Sanders, J. R., & Worthen, B. R. (2004). *Program evaluation: alternative approaches and practical guidelines* (3<sup>rd</sup> Ed.). Pearson Education.

Miles, M. B., & Huberman, M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage Publications.

Northcutt, N. & McCoy, D. (2004). *Interactive qualitative data analysis*. Thousand Oaks, CA: Sage.

Ohio State Extension. (2008). *Successful Assessment Methods and Measurement In Evaluation (SAMMIE)*. Retrieved January 4, 2008 from <http://sammie.osu.edu/>

Patton, M. Q. (1997). Chapter 13. In *Utilization-focused evaluation: The new century text* (3<sup>rd</sup> Ed.). Thousand Oaks, CA: Sage.

Preskill, H., & Russ-Eft, D. (2005). *Building evaluation capacity: 72 activities for teaching and training*. Thousand Oaks, CA: Sage Publications.

Silverman, D. (2001). *Interpreting qualitative data* (2<sup>nd</sup> Ed.). Thousand Oaks, CA: Sage.

Salkind, N. (2007). *Statistics for people who think they hate statistics*, (3<sup>rd</sup> Ed.). Thousand Oaks, CA: Sage Publications.

*Statistical Resources on the on the web*

<http://www.psychstat.missouristate.edu/scripts/dws148f/statisticsresourcesmain.asp>

Strauss, A. L. (1987). *Qualitative analysis for social scientists*. New York: Cambridge University Press.

Taylor Fitz-Gibbon, C., & Lyons Morris, L. (1987). *How to analyze data*. Newbury Park, CA: Sage Publications.

Taylor-Powell, E., & Renner, M. (2003). *Analyzing qualitative data*. Madison, WI: University of Wisconsin-Extension. Retrieved from <http://learningstore.uwex.edu/pdf/G3658-12.PDF>

Tromchin, M.K., *Research Methods Knowledge Base: Descriptive Statistics*  
<http://www.socialresearchmethods.net/kb/statdesc.htm>  
<http://www.socialresearchmethods.net/kb/statcorr.php>

University of Kentucky College of Agriculture. *Program Development and Evaluation Resources*. Retrieved from <http://www.ca.uky.edu/agpsd/soregion.htm>



University of Wisconsin Extension. Publication G3658-12 *Analyzing Qualitative Data*. Retrieved from <http://learningstore.uwex.edu/pdf/G3658-12.PDF>

University of Wisconsin Extension. Publication G3658-14 *Using Excel for Analyzing Survey Questionnaires*. Retrieved from <http://learningstore.uwex.edu/pdf/G3658-14.pdf>

Wholey, J. S., Hatry, H. P., & Newcomer, K. E. (2004). Part Three. In *Handbook of practical program evaluation* (2<sup>nd</sup> Ed.). San Francisco: Jossey-Bass.

Wolcott, H. F. (2001) *Writing up qualitative data* (2<sup>nd</sup> Ed.). Thousand Oaks, CA: Sage.

## **Competency 7: Communicating Evaluation Results**

This competency involves learning how to convert evaluation results into forms of communication that are useful to various stakeholders. The purposes of reporting, the content of a standard evaluation report, how to identify stakeholders, and how to present the results that matter most to different stakeholder groups are included.

### **Novice Level**

*Demonstrated Competencies:*

- Knows the purpose of planning and reporting evaluation results.
- Knows can identify different stakeholder audiences and items of importance to each audience.
- Knows the standard content of evaluation reports

### **Advanced Beginner Level**

*Demonstrated Competencies:*

- Individual can develop basic evaluation reports which include all standard sections.
- Individual knows the different types of evaluation reports.

### **Practitioner Level**

*Demonstrated Competencies:*

- Individual can develop complete evaluation reports which are adapted for specific audiences

**Resources to assist with this competency area:**

*Beyond the Basics: Evaluating Community-Based Programs*, University of Arizona:  
<http://ag.arizona.edu/fcs/cyfernet/cyfar/index5.htm>

Callor, S., Betts, S., Carter, R., Marczack, M., Peterson, D., & Richmond, L. (2000).  
*Community-Based Project Evaluation Guide*, University of Arizona, Institute of  
Children, youth, and Family:  
[http://ag.arizona.edu/fcs/cyfernet/cyfar/stst\\_guide.pdf](http://ag.arizona.edu/fcs/cyfernet/cyfar/stst_guide.pdf)

Fitzpatrick, J. L., Sanders, J. R., & Worthen, B. R. (2004). *Program evaluation:  
alternative approaches and practical guidelines* (3<sup>rd</sup> Ed.). Pearson Education.

Ohio State Extension. (2008). Successful Assessment Methods and Measurement In  
Evaluation (SAMMIE). Retrieved January 4, 2008 from <http://sammie.osu.edu/>

Patton, M. Q. (1997). *Utilization-focused evaluation: The new century text* (3<sup>rd</sup> Ed.)  
Thousand Oaks, CA: Sage. (Chapter 13).

*Planning and Evaluation Resource Center*, Tufts University:  
<http://www.evaluationtools.org>

*Success Story Guidance*, University of Wisconsin Extension:  
<http://www.uwex.edu/ces/prs/success.cfm>

Torres, R. T., Preskill, H., Piontek, M. E. (2005). *Evaluation strategies for  
communicating and reporting* (2nd Ed.). Thousand Oaks, CA: Sage.

*University of Kentucky, College of Agriculture, Program Development and Evaluation  
Resources*: <http://www.ca.uky.edu/agpsd/soregion.htm>

Wholey, J. S., Hatry, H. P., & Newcomer, K. E. (2004). *Handbook of practical program  
evaluation* (2<sup>nd</sup> Ed.) San Francisco: Jossey-Bass. (Part Three).

**References**

American Evaluation Association (2004). *Guiding Principles for Evaluators*. Fairhaven,  
MA: Author. Retrieved from  
<http://www.eval.org/Publications/GuidingPrinciples.asp>

American Psychological Association (2001). *Publication Manual of the American  
Psychological Association* (5<sup>th</sup> Ed.). Washington, DC: Author.

- Arnold, M. E. (2006). Developing evaluation capacity in Extension 4-H field faculty: A framework for success. *American Journal of Evaluation*, 27, 257-269.
- Baumberger, M., Rugh, J., Mabry, L. (2006). *Real world evaluation*. Thousand Oaks, CA: Sage.
- Boone, E. J.; Safrit, R. D.; & Jones, J. (2002). *Developing programs in adult education: A conceptual programming mode* (2<sup>nd</sup> Ed.). Evanston, IL: Waveland Press.
- Bouffard, S., & Little, P. (2004). *Detangling Data Collection: Methods for Gathering Data*. Cambridge, MA: Harvard Family Research Project. Retrieved from <http://www.gse.harvard.edu/hfrp/content/projects/afterschool/resources/snapshot5.pdf>
- Bradburn, N., Sudman, S., & Wansink, B. (2004). *Asking questions*. San Francisco: Jossey-Bass.
- Cohen, C. (2006). Evaluation learning circles: A sole proprietor's evaluation capacity-building strategy. *New Directions in Evaluation*, 111, 85-93.
- Cooksy, L. (2005). The complexity of the IRB process: Some of the things you wanted to know about IRBs but were afraid to ask. *American Journal of Evaluation*, 26(3), 352-361.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed-method approaches* (2<sup>nd</sup> Ed.). Thousand Oaks, CA: Sage Publications.
- Davidson, E. J. (2005). *Evaluation methodology basics: The nuts and bolts of sound evaluation*. Thousand Oaks, CA: Sage.
- Delgado, M. (2006). *Designs and methods for youth-led research*. Thousand Oaks, CA: Sage
- Department of Agricultural and Extension Education. (2008). AEE 577 Evaluation in Agricultural and Extension Education, Class II: Approaches and Models of Evaluation.. Retrieved January 4, 2008 from [www.cals.ncsu.edu/agexed/aee577/Class%20II/aee577class2.html](http://www.cals.ncsu.edu/agexed/aee577/Class%20II/aee577class2.html)
- Dillman, D. A. (2000). *Mail and Internet surveys: The tailored design method*. New York: John Wiley & Sons, Inc.
- Douglah, M. (1998). *Developing a concept of Extension program evaluation*. Retrieved January 4, 2008 from <http://learningstore.uwex.edu/pdf/G3658-7.PDF>
- Douglah, M., Boyd, H., & Gundermann, D. (2003, November). *Nurturing the development of an evaluation culture in public educational agencies*. Paper presented at the Annual Conference of the American Evaluation Association, Reno NV.

- Festen, M., & Philbin, M. (2007). *Level best: How small and grassroots nonprofits can tackle evaluation and talk results*. San Francisco: Jossey-Bass.
- Fink, A. (2002). *How to Manage, Analyze, and Interpret Survey Data* (2<sup>nd</sup> Ed.). Thousand Oaks: Sage Publications.
- Fitzpatrick, J. L., Sanders, J. R., & Worthen, B. R. (2004). *Program evaluation: alternative approaches and practical guidelines* (3<sup>rd</sup> Ed.). Pearson Education.
- Fowler, F. J. (1995). *Improving survey questions: Design and evaluation*. Thousand Oaks: Sage Publications.
- Guion, L., Boyd, H., & Rennekamp, R. A. (2007). An exploratory profile of Extension evaluation professionals, *45*(4). Retrieved from <http://www.joe.org/joe/2007august/a5.shtml>
- McLaughlin, J. A., & Jordan, G. B. (2004). Using Logic Models. In J. S. Wholey, H. P. Hatry, and K. E. Newcomb (Eds.) *Handbook of practical program evaluation* (2<sup>nd</sup> Ed.). San Francisco: Jossey Bass.
- Mertens, D. M. (2005). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (2<sup>nd</sup> Ed.). Thousand Oaks, CA: Sage.
- Newman, D. L., & Brown, R. D. (1996). *Applied ethics for program evaluation*. Thousand Oaks: Sage Publications.
- Ohio State Extension. (2008). Successful Assessment Methods and Measurement In Evaluation (SAMMIE). Retrieved January 4, 2008 from <http://sammie.osu.edu/>
- Patton, M. Q. (1997). Focusing Evaluations: Choices, Options, and Decisions. In *Utilization-focused evaluation: The new century text* (3<sup>rd</sup> Ed.). Thousand Oaks, CA: Sage.
- Ramlow, M. E. (2007). *Program Evaluation Standards*. Retrieved December 27, 2007 from [www.eval.org/EvaluationDocuments/progeval.html](http://www.eval.org/EvaluationDocuments/progeval.html)
- Rockwell, K., & Bennett, C. (2008). *Hierarchy for Targeting Outcomes and Evaluating their Achievement*. Retrieved January 4, 2008 from <http://citnews.unl.edu/TOP/english/>
- Rossi, P. H., Lipsey, M. W., & Freeman, H. E. (2004). *Evaluation: A systematic approach* (7<sup>th</sup> Ed.). Thousand Oaks; Sage.
- Sabo, K. F. (2007). *Youth participatory evaluation: Strategies for engaging young people*. San Francisco, CA: Jossey Bass.
- Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday.

- Silliman, B. (2007). *Critical indicators of youth development outcomes*. Retrieved December 27, 2007 from [www.national4hheadquarters.gov/library/Indicators\\_4H\\_MM.pdf](http://www.national4hheadquarters.gov/library/Indicators_4H_MM.pdf)
- Silverman, D. (2001). *Interpreting qualitative data* (2<sup>nd</sup> Ed.). Thousand Oaks, CA: Sage.
- Stufflebeam, D.L. (2002). The CIPPmodel checklist. Retrieved January 4, 2008 from [www.wmich.edu/evalctr/checklists/cippchecklist.html#process](http://www.wmich.edu/evalctr/checklists/cippchecklist.html#process)
- Torres, R. T., Preskill, H., Piontek, M. E. (2005). *Evaluation strategies for communicating and reporting* (2nd Ed.). Thousand Oaks, CA: Sage.
- University of Wisconsin Extension. (2008). Logic Model Evaluation. Retrieved January 4, 2008 from [www.uwex.edu/ces/pdande/evaluation/evallogicmodel.html](http://www.uwex.edu/ces/pdande/evaluation/evallogicmodel.html)
- University of Wisconsin Extension. (2008). Program Development. Retrieved January 4, 2008 from [www.uwex.edu/ces/pdande/progdev/index.html](http://www.uwex.edu/ces/pdande/progdev/index.html)
- Wholey, J. S.; Hatry, H. P. & Newcomer, K. E. (2004). Part Three. In *Handbook of practical program evaluation* (2<sup>nd</sup> Ed.). San Francisco: Jossey-Bass.
- Wolcott, H. F. (2001) *Writing up qualitative data* (2<sup>nd</sup> Ed.). Thousand Oaks, CA: Sage.

## Appendix E

### Web-based General Program Evaluation Resources

The following links provide some great guidelines for evaluating community-based programs.

#### General Guides to Program Evaluation

##### [A Guide to Family Intervention and Prevention Program Evaluation](#)

This step-by-step guide provides a basic overview to planning and implementing a youth program evaluation, with a slight focus on family violence prevention and intervention programs.

##### [2002 National Science Foundation User-Friendly Handbook To Program Evaluation](#)

This handbook provides a lengthy but user-friendly guide to evaluating programs, from early design to qualitative and quantitative analysis with a special focus on creating culturally responsive evaluations.

##### [Administration on Children, Youth, and Families \(ACYF\) Program Managers' Guide to Evaluation Research](#)

This nine-chapter handbook is an easy-to-use guide through all steps in evaluation research, with a special focus on youth program evaluation. The guide provides step-by-step instructions through design, implementation, analysis and data reports.

[Ways to Improve the Quality of Your Program Evaluations](#), a quick guide to improving your program evaluation.

[Basic guide toward planning and implementing](#) an evaluation process for for-profit or nonprofit programs

#### Design and Implementation

##### [Cost Analysis in Evaluation Research](#)

This Web site provides an overview of how to conduct an adequate cost analysis prior to conducting evaluation research.

##### [Alternative Methods for Collecting Evaluation Data](#)

This Web site provides some useful guidelines for implementing alternative evaluation data strategies. Topics include: focus groups, cost analysis, portfolio assessment, qualitative interviews, and existing records.

##### [Quick Tips for Evaluation Research](#)

This Web site by the University of Wisconsin-Extension group provides some quick tips for evaluation research from planning, collecting and analyzing data. The guide concludes with a discussion on how to effectively communicate and evaluate your data.

### [Using Logic Models](#)

This site by the University of Wisconsin-Extension group provides some helpful information for creating and implementing logic models in evaluation research.

[Enhancing Program Performance with Logic Models](#) Comprehensive interactive Web resource to learn about and improve your use of logic models now available.

### [Using Surveys in a Community](#)

This Web site provides a general overview for designing, distributing, and using questionnaire data.

### [Communicating with Your IRB](#)

This guide provides some useful tips on how to communicate the goals of your project with your IRB through all stages of program evaluation.

[Three self-study web modules](#) to improve your practice: Module 1: Focusing your evaluation, Module 2: End-of-session evaluations and Module 3: Using evaluation data.

[Introduction to Program Evaluation](#) which includes types of program evaluation, steps of evaluation, methods for gathering data, data collection techniques, etc.

[The Penn State Cooperative Extension Program Evaluation](#) provides information to design and implement a useful program evaluation in order to improve a program, compare delivery methods, respond to stakeholders, advocate and prepare for promotion.

## **Communicating Your Findings**

[Beyond the Data](#) This interactive Web site provides a basic guide for how best to communicate evaluation research findings in a meaningful way.

## **Specifics on Program Evaluation**

### [Step-By-Step Manuals for Program Evaluation](#)

Publisher: CYFER.net

Description: This Web site includes more than 41 step-by-step guides to evaluating youth programs.

### [Online Handbooks and Textbooks for Evaluation Research](#)

Publisher: American Evaluation Association

Description: This Web site includes a host of general and program-specific online textbooks and evaluation research handbooks.

### [Evaluation Research Methods](#)

Publisher: CYFERnet

Description: This Web site includes 28 guides and articles related to conducting program evaluations. [The Evaluators' Institute](#) offers short term professional development courses for practicing evaluators.

[International Organization for Cooperation in Evaluation](#) helps legitimate evaluation and support evaluation societies, associations and networks so that they can better contribute to good governance, effective decision making and strengthen the role of civil society.

[The National Legislative Program Evaluation Society](#) offers a wealth of learning and professional development opportunities for program evaluators, whether new or experienced. Includes links to state offices of program evaluation and/or performance auditing in the USA.

[The American Evaluation Association](#) is an international professional association of evaluators devoted to the application and exploration of program evaluation, personnel evaluation, technology and many other forms of evaluation.



## Appendix F

### Where to go for Program Evaluation Coaching and Expertise

#### UNR Center for Research Design and Analysis

Contact: George Fernandez, Director

[gcf@unr.edu](mailto:gcf@unr.edu); 775-784-4206

- The CRDA is an academically based, multidisciplinary statistical research and service center under the Vice President of Research at the University of Nevada, Reno.
- The Center's survey analysis mission is to provide the most valid and reliable data possible across a broad spectrum of data collection protocols and analysis activities.
- Since 1959 CRDA have completed hundreds of random digit dial survey research projects ranging from sample sizes of 600 to more than 6,000 interviews.
- CRDA utilizes a wide range of data collection techniques for telephone, mail and Internet surveys. These techniques include a state-of-the-art, computer-assisted telephone interview (CATI) system and computer-assisted personal interview (CAPI) systems.
- CRDA also uses TELEFORM, a sophisticated questionnaire design software used to fully automate large-scale questionnaire mail-out projects.
- CRDA can also assist in online survey development and analysis
- The Center's staff provide expertise in survey research, psychometrics, Univariate and multivariate statistical analysis, research design, sampling, mathematical modeling, needs assessment and program evaluation.
- Many of the Center's research projects are aimed at solving problems and providing data and information to state and federal agencies for use in program planning and resource allocation.
- Specialized workshops training on:
  - Designing, managing, and analyzing multisite evaluations
  - Designing mail surveys
  - Designing in-person interviews
  - Designing telephone surveys
  - Designing Internet surveys
  - Linking evaluation questions to analysis techniques
  - Method of testing survey questions
  - Ways to deal with missing data
  - Quantitative data analysis
  - Qualitative data analysis
  - Selecting the most appropriate analysis techniques
  - SPSS or SAS training
  - How to understand and interpret results

## **UNR Center for Partnership Evaluation (CPE)**

Contact: Elizabeth Christansen, Interim Director  
[echrist@unr.nevada.edu](mailto:echrist@unr.nevada.edu); 775-784-6995

CPE provides a range of services from technical assistance to full external evaluations to numerous organizations and agencies using a partnership evaluation model. Partnership evaluation represents a shared and active approach to critical inquiry, with evaluators sharing the responsibility and commitment for evaluation with community and program stakeholders. Evaluators and stakeholders work together to assess programs or organizations and use information gleaned from the evaluation to inform decision-making and improve programs and systems.

Unlike more traditional research and evaluation designs, partnership evaluation designs are more evolutionary in nature—methodology and questions emerge as program processes evolve and as preliminary findings reveal new directions and program impacts not identified at the outset of the process. Our program evaluations blend traditional research methods and reporting, such as pre-post surveys and technical reports, with alternative methods and reporting strategies as dictated by program and client needs.

Three focal service areas of the Center for Program Evaluation are:

1. Securing grants and contracts to provide quality evaluation services for new initiatives, programs, and service delivery systems both independently and in collaboration with the University faculty and community-based partners
2. Increasing the capacity of UNR faculty, community based organizations and educational and health systems in Nevada through ongoing evaluation training, support and technical assistance
3. Providing high-quality training experiences to promote evaluation as a profession to help meet the growing demand for program evaluation services