Michael P. Shea, Ph.D., OIPRC Evaluation Coordinator

Rev. 2007/01/31

HOW TO CREATE AN INTERNAL EVALUATION PLAN USING A PROGRAM LOGIC MODEL

BACKGROUND:

Rush & Ogbourne (1991) used the term "program logic model" to describe a schematic representation of a program that was used to clarify a program's purposes, causal assumptions and intended impacts. The program logic model was created from the inputs of program personnel and was verified by program managers before finalization.

Evaluators recommend that a logic model be developed because it benefits subsequent evaluation processes in a number of important ways. In short, having a logic model for the program ensures that the evaluator has an accurate understanding of the program's processes and intended outcomes. This understanding permits the evaluator to choose appropriate evaluation methods and measures of program performance that are valid criteria and will be accepted as such by program stakeholders.

Since that time, a number of refinements to the structure of program logic models have been suggested (Unrau, 1993; den Heyer, 2002; Goertzen, Fahlman, Hampton & Jeffrey, 2003) and their use as a tool for planning and evaluating programs have been widely promoted (Wong-Rieger & David, 1995; Porteous, Sheldrick & Stewart, 1997; Rowan, 2000).

However, the issue remains the same. The program logic model is a useful tool for evaluation planning. As a result, in early 2007, the use of program logic models as a tool for evaluation planning has become widespread.

What we are suggesting is that the use of the program logic model in evaluation planning should become more formalized. Specifically, we are suggesting the program's logic model can be directly used to assist in the creation of the evaluation plan for a program or project. How this can be accomplished is briefly described below.

KEY ISSUES & STRATEGIES IN THE USE OF PROGRAM LOGIC MODELS

When a basic method of constructing a program logic model is used, it results in the specification of the program's major components (e.g. in-person training), the specific program activities that comprise each component (e.g. instruction in how to use Microsoft Word, how to search the Internet, how to be interviewed for a job) and the targets of these activities (clients who desire job preparation training). In addition, the logic model specifies the intended short-term outcomes (e.g. increased skills in the areas of training) and long-term outcomes (e.g. success in obtaining new employment).

Having this information provides an evaluator with the opportunity to develop an evaluation plan that directly corresponds to the structures and intended outcomes of a program as follows.

First, the evaluation plan is organized by program component. That is to say, that a separate set of evaluation methods and measures is needed for each program component. For example, using the examples from above, “In-Person Training” is one component of the Job Readiness Preparation Program. An additional component might be “Preparation for Applying for a Job”. “In-Person Training” is a single component of the program and a set of evaluation methods will be developed to measure the effectiveness of training (e.g. Kirkpatrick’s four-level model of training evaluation from 1996). Each other component of the program will need its own set of evaluation methods and measures.

Second, within the section of the evaluation plan on each component, an evaluation measure for each of the intended outcomes specified in the logic model will be selected or created. An example of an evaluation of a short-term outcome could be pre-tests and post-tests of the clients’ ability to use Microsoft Word. An example of a long-term outcome that this program component contributes might be “the percentage of trainees who obtain full-time employment within three months of completing the course”. It should be noted that other program components will have different short-term outcomes but will also contribute to the achievement of the long-term outcome.

Third, a data collection strategy and timetable for each evaluation measure will be required. This specifies how the data will collected (e.g. which evaluation measure will be used), who will collect it (e.g. course instructor) and when it will be collected (e.g. on Day #1 and the last day of training).

Fourth, a strategy and timetable for data entry and analysis is needed. This specifies when and how data entry and analysis will occur.

Fifth, a set of strategies for the interpretation and reporting of results needs to be created. This will specify the format in which the results will be presented (e.g. presentation to group, written report, executive summary), who the results will be presented to (e.g. program management group, meeting of line staff), who will present which results and the timing of the delivery of results to program format.

When all five steps are completed for all of the program’s components, a PLM-based evaluation plan will be the result. It should be noted however, that stakeholders may have some additional evaluation questions that do not involve looking at the production of intended program outlines that need to be included in evaluation planning. For example, they might ask, “Was the program implemented as intended?” “Do program clients fit the intended target group?” “Does the program produce any unintended outcomes for clients” and so on. The evaluation plan will need to include how these questions will be answered using the same format discussed here.

A form for the development of a PLM-based evaluation plan will now be presented.

SAMPLE PROGRAM EVALUATION PLAN
BASED UPON A PROGRAM LOGIC MODEL

COMPONENT & ACTIVITY	EVALUATION METHODS & MEASURES	DATA COLLECTION	DATA ENTRY & ANALYSIS	RESULTS INTERPRETATION & PRESENTATION
1) IN-PERSON TRAINING				
1.1) Microsoft Word	Pre-tests and post-tests of skill level using Form A	Pre-test by clients on Day #1 of program and post-test on last day (#20) using Form A	Data entered into Excel by support staff within 2 days of day #20 and analysis by Research Assistant within one week	- Results to produced in table form for Power point and report by Jan. 31 by support staff - To be presented by consultant to Managers on Feb. 2 - Final report to be written by consultant and delivered by Feb. 9
1.2) Internet Searching	Post-test only of skill level using Form B	Post-test using Form B completed by clients on Day #20	Form Bs scored by RA within and scores entered by support staff within one week	Same as above
1.3) Interview Skills	Post-test only using instructor's ratings of interview role play with Form C	Post-test using Form C completed by instructor on Day #20	Same as above for Form Cs	Same as above
2) PREPARATION FOR APPLYING FOR A JOB				
2.1) Resume Making	Client's resume rated using	Form D completed on	List of all clients with	Same as above

	Form D with feedback to client	Day #19 by instructor for use by client in revision of resume on Day #20	appropriate resume & percentage of total clients completed by support staff	
2.2) Appearance Coaching	…			
ADDITIONAL EVALUATION QUESTIONS				
3) Do program clients fit the intended target group?	Compare client demographics from registration forms to intended target group demographics (e.g. age, years unemployed)	Data collected from existing program registration forms	RA to do analysis of actual client demographics versus target	Slide produced for Power point by RA and section on this question included in final report

REFERENCES

Corbeil, R. C. (1989). Improving federal evaluation planning. Canadian Journal of Program Evaluation, Vol. 4, No. 2, 23-38.

Den Heyer, M. (2002). The temporal logic model concept. Canadian Journal of Program Evaluation, Vol. 17, No. 2, 27-47.

Goertzen, J. R.; Fahlman, S. A.; Mampton, M. R. & Jeffrey, B. L. (2003). Creating logic models using grounded theory: A case example demonstrating a unique approach to logic model development. Canadian Journal of Program Evaluation, Vol. 18, No. 2, 115-138.

Porteous, N.; Sheldrick, B. & Stewart, P. (1997). A Program Evaluation Toolkit: A Blueprint for Public Health Management. Ottawa-Carleton Public Health Unit, Ottawa, ON.

Rowan, M. (2000). Logic models in primary care reform: Navigating the evaluation. Canadian Journal of Program Evaluation, Vol. 15, No. 2, 81-92.

Rush, B. & Ogbourne, A. (1991). Program logic models: Expanding their role and structure for program planning and evaluation. Canadian Journal of Program Evaluation, Vol. 6, No. 2, 95-106.

Unrau, Y. (1993). A program logic model approach to conceptualizing social service programs. Canadian Journal of Program Evaluation, Vol. 8, No. 1, 117-134.

Wong-Rieger, D. & David, L. (1995). Using program logic models to evaluate education and prevention programs. In Love, A. (Editor), Evaluation Methods Sourcebook II, Canadian Evaluation Society, Ottawa, ON.