Logic Modeling Methods in Program Evaluation, by Joy A. Frechtling. San Francisco, CA: Jossey-Bass, 2007.

Reviewed by Daniela C. Schröter & Jessica L. Urschel
Western Michigan University

Logic modeling methods in program evaluation is a topic that is repeatedly discussed among program evaluators. As such, the book appears very timely indeed. The purpose of the book is to introduce the tool "logic model" and the associated process of "logic modeling" for use in a range of evaluation projects, from small to large and simple to complex.

While the text is targeted primarily at new and experienced evaluators, the author also sees merit for stakeholder groups who work with evaluators, including policy makers, funders, and program managers. And it is true; the text has merit for a range of readers. Both program developers and evaluators can explore the intricacies of the logic modeling process for use in their specific areas of expertise. Teachers of evaluation courses and workshops will find a breadth of issues pertaining to logic modeling and questions that urge their students to critically reflect on the reading. Promoters of logic modeling will find food for thought to reflect on their practice and opponents will see their many concerns addressed well. After all, the logic model is one of many tools that can be useful in evaluation, but is not an evaluation approach.

The book is divided into 12 chapters, an appendix that discusses key phases of evaluation, and a glossary of terms. Each chapter ends with questions to consider. Chapters 1 and 2 provide the foundation to the text. Frechtling begins by introducing "Evaluation and Logic Models." Frechtling sees the purpose of evaluation as a way to gauge the relative or absolute success or failure of evaluands (e.g., products, projects, programs, or systems). Both formative and summative functions are stressed, while logic modeling is theoretically grounded within program theory approaches to evaluation and finds use in systems theory and performance measurement. In chapter 2, "The Uses of Logic Models" are discussed. Frechtling shows how logic modeling can be beneficial to varying constituencies (program managers as much as evaluators), at different stages of a program's life cycle, and for evaluands that differ in complexity. Key uses include clarification, communication, management, evaluation planning, the determination of evaluation questions, project documentation, as well as problem solving.

Chapters 3 and 4 discuss the key elements of logic models. "The Components of a Logic Model" (Chapter 3) include four basic components: inputs, activities, outputs, and outcomes, as well as two alternatives: context and impact. Examples and initial advice on how to develop logic models are provided. Thus, Frechling suggests beginning the modeling process with the outcomes which can exist on varying levels (e.g., individual versus community level) and that it is important to describe activities in the appropriate level of generality (i.e., "grain"). She argues that many programs, though important, do not focus on impacts, but instead aim at addressing specific needs.

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Defined as "intended or unintended changes" that occur as a result of an evaluand on a system, community, or organizational level, Frechtling suggests that "evaluators are far more likely to need to address context than impact" (p. 29). "The Connections in a Logic Model," a difficult task within logic modeling, are captured in Chapter 4. Simple line connections establish links between elements of the same component, while arrows are used to depict directions of influence. For Frechtling, these arrows can be confirmed via explanatory evaluation models. It is important that each element under a component is connected to at least one of the elements in the succeeding component. Otherwise the element appears trivial or useless. A common flaw in developing logic models is that all elements under one component are linked to all elements within the next component, resulting in a lack of specificity. In addition to causal arrows, Frechtling suggests the use of feedback loops which indicate when information gained within one component can be fed back to prior components within the model.

In Chapter 5, "Developing Logic Models to Support Evaluation," three practices are introduced. First, teaming is highlighted as a means for enhancing logic model development by engaging both program developers and evaluators. Secondly, collaborative learning is discussed as an outcome of team involvement, that is, by engaging team members in discussions about their logic models, respective operational definitions, and consensus building processes. The third technique is timing. While it is argued that early development of a logic model may be beneficial, Frechtling contends that it can make a contribution at any time, under the condition that it is done thoughtfully and that participants understand the iterative nature of the logic modeling process. Regardless of when a model is developed, it will have to be revisited and revised as the program demands it. Two examples are illustrated in Chapter 6, "Developing Logic Models of Differing Complexity." Within this chapter, Frechtling exemplifies the common confusion of outcomes and outputs, the importance of involving varying stakeholders into the process, distinctions between personal goals and goals of a program, opportunities to uncover differing perspectives and assumptions about the program, and the amount of time involved in the process. The second example is further used in Chapter 7, to illustrate how the creation of a thoughtfully completed logic model can supply questions for formative and summative evaluation, with specific attention to program implementation (i.e., fidelity), progress (toward goal achievement), and outcome assessment. Once key questions have been identified, the next step is to prioritize them under consideration of feasibility, need, and practical assumptions.

Chapter 8 emphasizes the use of logic models in explanatory evaluations, which as Frechtling points out, raises the debate about differences between research and evaluation. However, "evaluators who espouse logic modeling frequently reject the distinction (between research and evaluation) and feel that evaluation has three parts" (p. 77). In essence, it is argued that users of logic models often see a need for explanatory evaluation, which, in addition to formative and summative evaluation questions, asks why and under what conditions something does or does not work. She also argues that the confirmation or disconfirmation of the theory of change allows for stronger claims about causality and the validity of the theory of change. This type of study usually yields a revision of the existing logic model and generates knowledge about what elements of the theory of change do and do not work.

"Challenges in Developing Logic Models" are emphasized in Chapter 9. Problems resulting from semantic misunderstandings, replacing outcomes with specific measures, the linearity assumed by the logic models, missing time specification, and finding the appropriate level of specificity are highlighted. Additionally,

problems with overusing the tool (e.g., in scenarios where logic modeling is inadequate) or using the tool too lightheartedly without critically examining alternative theories or contextual factors are discussed. Finally, Frechtling stresses concerns with evaluator objectivity that may arise due to the intensity of engagement of the evaluator and frequent interaction with stakeholders: "It is important that the evaluator remain sensitive to this issue [of objectivity] and recognize the difference between sharpening the theory of change and shaping it" (p.95).

Chapters 10 and 11 provide further examples of using logic models for complex projects (Chapter 10) and for families of project (Chapter 11). The final chapter, "Using Logic Models to Provide Technical Assistance," illustrates how logic models can be used within community capacity building, altered for specific projects, and leveraged for project evaluation.

In the book's appendix, Frechtling provides an overview of six potential phases of evaluation when using logic models. First, a conceptual model of the project is to be developed to identify key evaluation points. Second, key stakeholders are identified, measurable outcomes established, and evaluation questions of relevance to the stakeholder groups are determined, prioritized, and eliminated. Third, the evaluation design is developed, including the selection of a methodological approach, subjects, and consideration about how to manage the evaluation. Phases four through six involve data collection, analysis, and reporting.

Overall, the book is well written, and structured clearly and concisely. The only missing piece appears to be the lack of providing a description of the best available means for depicting logic models. While many readers may be technologically versatile, some may benefit from a reflection on experience with using different tools for drawing logic models. Each chapter includes useful examples to illustrate key points and questions that encourage critical thinking about the tool and the process. Furthermore, the text is likely the most comprehensive representation of logic modeling within evaluation to date. Not only does Frechtling show how logic modeling can contribute to evaluation, she also emphasizes key shortcomings and incorrect applications. Common debates about logic modeling in evaluation are well reflected within the text.

The book is definitely worth buying. Both program developers and evaluators will find the text useful. The text is a good reference for novice evaluators who would like to learn about the potential and limitations of the tool. Similarly, it is a useful reference for experienced evaluators who may be using logic modeling as a common practice within evaluation and can reflect on their uses. It is also a good text for opponents of logic modeling who may be persuaded of the merit of the technique within evaluation. Lastly, Frechtling's book would also be good material for use in classrooms and workshops.