Program Evaluation Toolkit
Module 1, Chapter 1: Logic Models

Regional Educational Laboratory Central

From the National Center for Education Evaluation at IES

Speaker 1:

Welcome to the first module of the *Program Evaluation Toolkit*. The toolkit is designed so that you can start with any module, but it is best to start with module 1, which sets the foundation for program evaluation and establishes a common vocabulary used throughout the toolkit.

In this module, you will develop your own logic model to ground your program evaluation efforts. A logic model clearly defines a program and its expected outcomes. Throughout the toolkit, you will refer to the logic model as you develop evaluation questions, choose an evaluation design, select a sample, identify data sources to address the questions, develop data collection instruments, finalize an analysis plan, and disseminate findings. For an overview of the toolkit and guidance on where to begin, consult the *Quick Start Guide* in the resources section of the website.

This module includes four chapters highlighting the different components of a logic model.

Chapter 1 answers the question "What is a logic model?" and describes each of the major components of the model.

Chapter 2 focuses on writing a problem statement to answer the question "What is the problem that needs to be addressed?"

Chapter 3 describes the resources, activities, and outputs of the logic model. These three components answer the question "What is the program?"

Chapter 4 explains the outcomes of the logic model. This component answers the question "What outcomes do you expect from the program?"

Refer to the resources page on the website for worksheets, templates, and other resources to help you develop your own logic model.

Let's get started with the first chapter, which reviews the importance of program evaluation as well as the purpose and components of logic models.

To plan for the evaluation of your program, you will first develop a logic model. Many terms, such as "conceptual framework" and "theory of action," have been used for the same basic process of mapping all elements of a program to see not only what the program is but also what the program is expected to accomplish. Throughout this toolkit, the term "logic model" is used for this process.

The logic model lies at the center of program evaluation. Creating a logic model should be your first step in conducting an evaluation. All activities of the program should be represented in the logic model, and you will find yourself referring back to it frequently at each step of the cycle.

Keep in mind that developing a logic model is an iterative process. As you examine each component in your logic model, you will learn more about the program itself. You will continually update your logic model to reflect your evolving understanding of what the program is and what you expect it to accomplish.

A logic model clearly defines a program and its expected outcomes by answering two major questions:

1. What is the program and its activities?
2. What outcomes do you expect from the program?

The answers to these questions are arranged in the logic model, which is a graphical representation that highlights the relationships between the parts of the program and its expected outcomes. The logic model is a framework for program planning, implementation, and evaluation.

You can develop a logic model for an existing program or create one to help define and plan a program for future implementation. Whether the program exists or will be implemented, a logic model is an essential part of the evaluation process.

Simply put, you cannot evaluate a program unless you have clearly defined what the program is and how it is expected to work. Ideally, a logic model is a one-page representation of what the program is doing or expected to do and what you expect will result.

Here is a blank logic model that you will fill in over the course of module 1.

The logic model is a vital tool for planning and implementing a program evaluation, and it forms the foundation of the evaluation. It ensures that all stakeholders, especially evaluation team members, share a common language and understanding of what the program is and how it is meant to achieve its expected outcomes.

The logic model showcases connections between program components, clarifying the relationships between resources, activities, outputs, and outcomes. Building or refining the logic model may prompt conversations that help to clarify all aspects of the program. Such conversations are vital to identifying how the program will achieve its expected outcomes.

The logic model supports every activity of a program evaluation, and you will find yourself referring back to it as you plan and implement each step of the evaluation cycle.

Although there are many versions of a logic model, this toolkit uses a relatively simple one.

This logic model starts with a problem statement, which is a short description of the problem that the program is designed to address. Chapter 2 of this module describes how to draft a problem statement.

The three components in yellow—"resources," "activities," and "outputs"—describe how the program is structured and operates. In other words, these components answer the question "What is the program?" Chapter 3 of this module further describes resources, activities, and outputs.

The three components in blue—"short-term," "mid-term," and "long-term outcomes"—describe what the program is expected to accomplish. In other words, these components answer the question "What outcomes do you expect from the program?" Chapter 4 of this module describes outcomes in greater detail.

In a way, completing a logic model involves answering a series of "if-then" questions. For example, if you have this resource, then you can do this activity; if you do this activity, then you will generate this output—perhaps a product or training; and if you generate this product or training, then the program will result in these expected outcomes.

The resource *Definitions of Logic Model Components*, available on the resource page of the website, provides a more complete definition of each logic model component. You can download this document for reference as you move through the rest of Module 1.

This toolkit uses a fictitious program called AMMP!, which stands for After-School Middle-Grades Math Program, as an example.

In this example, a middle school has been experiencing low rates of math homework completion among its students. School leaders believe the low homework completion rates are contributing to low math achievement scores. Another issue at the school is high numbers of unsupervised students after school. The school leaders believe that the unsupervised students are contributing to community problems such as vandalism. To address these concerns, the middle school has started AMMP!.

AMMP! offers math tutoring, math extension activities, homework completion support, recreational activities, and field trips during after-school hours. Teachers also lead recreational activities and field trips to help students apply concepts from their math classes to real-world situations (for example, building model rockets and visiting a science museum). The field trips are sponsored by local organizations and businesses.

Here is an example logic model for AMMP! This model includes the most common components of a logic model: the problem statement; resources; activities; outputs; and short-term, mid-term, and long-term outcomes. In each of the following chapters in this module, you will explore the different components of this logic model. By the end of the module, you will have a complete understanding of what AMMP! is and how it might achieve its intended outcomes.

The logic model for AMMP!, including research citations, is available on the resources page of the website so that you can download it for further examination.

As you begin the process of developing a logic model for your program, keep a few things in mind.

First, it helps to include representatives from all stakeholder groups involved in the program when you develop the logic model. Stakeholders might include district staff, school administrators, educators who will deliver the program, trainers, community members, and direct and indirect recipients of the program (for example, students and their families). Involving stakeholders in logic model development helps to ensure that everyone has the same understanding of the program and that all the ways of thinking about the program are considered. Additionally, in the school setting, it is important to involve representatives from both the team conducting the evaluation and the team implementing the program (if they are different) in creating the logic model. That way, the evaluation team can work together to develop a logic model that is sufficiently complete to guide the evaluation process.

Next, consider using existing data about the problem and potential solutions to help create the model. In many cases, schools and districts have already collected data for school improvement plans or other documents. These data can inform many of the components highlighted in the logic model. For example, the evaluation team may review historical student achievement data to determine a long-term outcome related to student achievement. The team may also review existing data from others who have implemented potential solutions to the problem to determine the best approaches.

Finally, logic models can be developed in both directions. Some teams like to work forward (left to right), describing the program first and then the outcomes of the program. This direction often uses an “if-then” approach—for example, if a team conducts tutor training, then tutors will be able to help students with their homework. Other teams, especially those who are using a logic model to develop a new program, may work backward (right to left), first defining the outcomes and then describing a program that will achieve those outcomes. For example, a team working backward might ask the question “What do we need to have or do to improve student attitudes toward reading?”

Whichever direction you choose, treat logic model development as an iterative process. As you complete one component of the model, look back to see if the previous components contain all of the necessary information.

Next, in chapter 2, you will move to the first component of the logic model: the problem statement.

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