

# W.K. Kellogg Foundation Logic Model Development Guide

Using Logic Models to Bring Together Planning, Evaluation, and Action

# **Logic Model Development Guide**



To help people help themselves through the practical application of knowledge and resources to improve their quality of life and that of future generations.

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# **Chapter 1**

### Introduction to Logic Models

Chapter One defines logic models and explains their usefulness to program stakeholders. You will learn the relevance of this state-of-the-art tool to program planning, evaluation, and improvement.

ffective program evaluation does more than collect, analyze, and provide data. It makes it possible for you – program stakeholders – to gather and use information, to learn continually about and improve programs that you operate in or fund. The W.K. Kellogg Foundation believes evaluation – especially program logic model approaches – is a learning and management tool that can be used throughout a program's life – no matter what your stake in the program. Using evaluation and the logic model results in effective programming and offers greater learning opportunities, better documentation of outcomes, and shared knowledge about *what works* and *why*. The logic model is a beneficial evaluation tool that facilitates effective program planning, implementation, and evaluation.

## The What and Why of the Logic Model

#### The WHAT: Logic Model Definition

Basically, a logic model is a systematic and visual way to present and share your understanding of the relationships among the resources you have to operate your program, the activities you plan, and the changes or results you hope to achieve.



Figure 1. The Basic Logic Model.

The most basic logic model is a picture of how you believe your program will work. It uses words and/or pictures to describe the sequence of activities thought to bring about change and how these activities are linked to the results the program is expected to achieve.

A program logic model is a picture of how your program works – the theory and assumptions underlying the program. ... This model provides a road map of your program, highlighting how it is expected to work, what activities need to come before others, and how desired outcomes are achieved (p. 35).

W.K. Kellogg Foundation Evaluation Handbook (1998)

#### **Chapter 1**

The Basic Logic Model components shown in Figure 1 above are defined below. These components illustrate the connection between *your planned work* and *your intended results*. They are depicted numerically by steps 1 through 5.

YOUR PLANNED WORK describes what resources you think you need to implement your program and what you intend to do.

1. **Resources** include the human, financial, organizational, and community resources a program has available to direct toward doing the work. Sometimes this component is referred to as *Inputs*.

**2. Program Activities** are what the program does with the resources. **Activities** are the processes, tools, events, technology, and actions that are an intentional part of the program implementation. These interventions are used to bring about the intended program changes or results.

YOUR INTENDED RESULTS include all of the program's desired results (outputs, outcomes, and impact).

**3. Outputs** are the direct products of program activities and may include types, levels and targets of services to be delivered by the program.

4. Outcomes are the specific changes in program participants' behavior, knowledge, skills, status and level of functioning. Short-term outcomes should be attainable within 1 to 3 years, while longer-term outcomes should be achievable within a 4 to 6 year timeframe. The logical progression from short-term to long-term outcomes should be reflected in impact occurring within about 7 to 10 years.

**5. Impact** is the fundamental intended or unintended change occurring in organizations, communities or systems as a result of program activities within 7 to 10 years. In the current model of WKKF grantmaking and evaluation, impact often occurs after the conclusion of project funding.

The term *logic model* is frequently used interchangeably with the term *program theory* in the evaluation field. Logic models can alternatively be referred to as *theory* because they describe how a program works and to what end (definitions for each employed by leading evaluation experts are included in the Resources Appendix).

#### The What: How to "Read" a Logic Model

When "read" from left to right, logic models describe program basics over time from planning through results. Reading a logic model means following the chain of reasoning or "*If...then...*" statements which connect the program's parts. The figure below shows how the basic logic model is read.

Most of the value in a logic model is in the process of creating, validating, and modifying the model ... The clarity of thinking that occurs from building the model is critical to the overall success of the program (p. 43).

W.K. Kellogg Foundation Handbook (1998) Sample Factors

- influencing the trip:*Family members' school*
- and work schedules
- The holidays
- Winter weather
- Frequent Flier availability

Sample Activities:

- Creating/checking family schedules
- Gathering holiday flight and FF information
- Getting airport transportation
- Notifying Iowa relatives



Figure 2. How to Read a Logic Model.

#### The WHY: Logic Model Purpose and Practical Application

The purpose of a logic model is to provide stakeholders with a road map describing the sequence of related events connecting the need for the planned program with the program's desired results. Mapping a proposed program helps you visualize and understand how human and financial investments can contribute to achieving your intended program goals and can lead to program improvements.

A logic model brings program concepts and dreams to life. It lets stakeholders try an idea on for size and apply theories to a model or picture of how the program would function. The following example shows how the logic model approach works. (If you are familiar with logic models, you may wish to skip ahead to the section entitled "Why Use A Logic Model?")

#### An Example:

We are proposing an inexpensive family trip from Charleston, South Carolina, to Des Moines, Iowa, to visit relatives during December school holidays. The seasonal trip we dream of taking from Charleston to Des Moines is the "program." Basic assumptions about our trip "program" are:

- We want to visit relatives between 12/10/00 and 1/5/01 while the children are out of school.
- We will fly from South Carolina to Iowa because it takes less time than driving and because frequent flier (FF) miles are available.
- Using frequent flier miles will reduce travel costs.

We have to determine the factors influencing our trip, including necessary resources, such as, the number of family members, scheduled vacation time, the number of frequent flier miles we have, round trip air reservations for each family member, and transportation to and from our home to the airport. The activities necessary to make this happen are the creation of our own family holiday schedule, securing our lowa relative's schedule, garnering air line information and reservations and planning for transportation to and from the airport.

#### **Chapter 1**

#### Building a Logic Model by Basic Program Components

As you conceptualize your program, begin by describing your basic assumptions and then add the following program components in the order that they should occur.

- 1. *Factors* are resources and/or barriers, which potentially enable or limit program effectiveness. Enabling *protective factors* or *resources* may include funding, existing organizations, potential collaborating partners, existing organizational or interpersonal networks, staff and volunteers, time, facilities, equipment, and supplies. Limiting *risk factors* or *barriers* might include such things as attitudes, lack of resources, policies, laws, regulations, and geography.
- 2. *Activities* are the processes, techniques, tools, events, technology, and actions of the planned program. These may include *products* promotional materials and educational curricula; *services* education and training, counseling, or health screening; and *infrastructure* structure, relationships, and capacity used to bring about the desired results.
- 3. *Outputs* are the *direct results* of program activities. They are usually described in terms of the *size and/or scope of the services and products delivered or produced* by the program. They indicate if a program was delivered to the intended audiences at the intended "dose." A program output, for example, might be the *number* of classes taught, meetings held, or materials produced and distributed; program *participation rates* and demography; or *hours of each type of service* provided.
- 4. **Outcomes** are specific *changes in attitudes, behaviors, knowledge, skills, status, or level of functioning* expected to result from program activities and which are most often expressed *at an individual level.*
- 5. *Impacts* are *organizational, community, and/or system level changes* expected to result from program activities, which might include improved conditions, increased capacity, and/or changes in the policy arena.

Thinking about a program in logic model terms prompts the clarity and specificity required for success, and often demanded by funders and your community. Using a simple logic model produces (1) an inventory of what you have and what you need to operate your program; (2) a strong case for how and why your program will produce your desired results; and (3) a method for program management and assessment.

#### Other Logic Model Examples

In practice, most logic models are more complex and fall into one of three categories: the theory approach model (conceptual), outcome approach model, or activities approach model (applied) – or a blend of several types. It is not unusual for a program to use all three types of logic models for different purposes. No one model fits all needs, so you will