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Introducing Logic Models

This chapter introduces logic models. There are two types: theory of change and program. This chapter describes model benefits and uses and explains the role of modeling in both program and organizational effectiveness. The process of modeling begins with results. Regardless of type, quality models are evidence based.

LEARNER OBJECTIVES

- Explain the difference between models and modeling
- Recognize the benefits and uses of logic models
- Demonstrate how to "read" a logic model
- Recognize types of models and their characteristics
- Describe the ways that models can support effectiveness

Work in any sector, whether private, charitable or government, requires design, planning, monitoring, and evaluation. Each of these functions solves problems, and evidenced-based models are a great aid in any context. Perhaps you have been asked to design a new program, lead a change project, create a marketing strategy, or plan an evaluation. Did drafting a narrative to circulate among colleagues feel fragmented or inadequate? Did you think, "Where do I begin?" Logic models and modeling can be a potent option to resolve your dilemma. The *Guidebook* provides the practical support you need to create and use models. It will also enhance your understanding of the relationships between actions and results. Step by step, we describe how logic modeling can be used as both a tool and a process that resonate with learning and performance management.

Basic Concepts

Models and Modeling

Logic models support design, planning, communication, evaluation, and learning. They are often used when explaining an idea, resolving a challenge, or assessing progress. They can untangle and clarify complex relationships among elements or parts.

Logic models are a graphic way to organize information and display thinking. They are a visual approach to the implicit maps we all carry in our minds about how the world does or *should* work. Logic models are tools that convey a scheme, program, or project in a brief, visual format. Logic models describe planned action and its expected results. A model is a snapshot of an individual's or group's current thinking about how their idea or program might work.

Modeling is a technique. The process of modeling encourages iterative development of an idea, program, or project. It can create a safe space to start a debate, generate ideas, support deliberations, and allow one to think more clearly about specific relationships. A single, coherent logic reflects a consistent thread that connects design, plans, execution, and evaluation. This thread of evidence-based logic is critical to program and organizational effectiveness.

Modeling allows careful consideration of the relationship between activities and results. When tackled by a team or small group of stakeholders, models can be improved by engaging the knowledge and experience of others. We think modeling is significantly underutilized as a valuable process with real benefits. We believe the best models are socially constructed in a shared experience that is facilitated. The shared understanding and meaning they produce among colleagues are valuable and enable success in subsequent steps of implementation and assessment.

Logic Model Benefits

In addition to extraordinary execution, organizational effectiveness ultimately requires design, planning, monitoring, and success measures. Logic models can contribute to the quality of all of these. In Chapters 1 through 4, we address models from the design and planning perspective. In Chapter 5, we offer more detail about their use with monitoring and evaluation. Logic models also

- Develop common language among stakeholders.
- Offer highly participatory learning opportunities.
- Document and emphasize explicit outcomes.
- Clarify knowledge about what works and why.
- Identify important variables to measure and enable more effective use of evaluation resources.
- Provide a credible reporting framework.
- Lead to improved design, planning, and management.

When logic models and modeling are used as a standard technique, they can influence an organization's effectiveness. Logic models offer the strategic means to

critically review and improve thinking. And better thinking *always* yields better results. Modeling can happen well before resources are committed or final decisions get made. This offers a way to pretest quality and limit risk.

Effectiveness is not limited to—but certainly depends on—a clear vision, capable implementation, and the means to monitor both processes and results. Logic models can be tremendous supports for creating and communicating a common understanding of challenges, resources, and intended success. Moreover, models can also be used to calibrate alignment between the “big picture” and component parts. They can illustrate parts of or whole systems. Choosing a perspective can influence the level of detail. When modeling, this specifies boundaries as well as the breadth or depth of display. For example, a logic model can show the learning objectives for an elementary Spanish curriculum, what a school district will do to secure student achievement, or what the federal government will provide in educational resources for second-language learning.

Logic Models Defined

Logic models are a visual method of presenting an idea. They offer a way to describe and share an understanding of relationships (or connections) among elements necessary to operate a program or change effort. Logic models describe a bounded project or initiative: both what is planned (the doing) and what results are expected (the getting). They provide a clear road map to a specified end. The development of models (or the modeling process) provides an opportunity to review the strength of connection between activities and outcomes. Through the experience of critical review and development, models can display participants’ learning about what works under what conditions.

Models are the product of modeling—which we believe is best done in small groups of stakeholders with the aid of intentional facilitation. They complement systems thinking as a tool and technique for achieving valid but simplified representations of real-world complexities. Common synonyms for logic models include idea maps, frameworks, rich pictures, action, results or strategy maps, and mental models. Although logical frameworks (logframes) and causal loop diagrams (systems dynamics) are used for purposes similar to logic models, they are fundamentally different but complementary tools.

Logic Model Uses

While often used in the nonprofit sector among large nongovernmental organizations and foundations, logic models are of increasing interest among community-based organizations and the private sector, too. Because models enhance learning through the iterative exchange of information and experience, they offer important features to organizations that value evidence, diversity, dialogue, feedback, inquiry, great planning, and teams. Models can be used in program design, planning, implementation, and evaluation. For example, logic models can be used to design a marketing program, display a purchasing process, describe a school district’s education improvement plan, create a community leadership program, or establish the best ways to resolve conflict.

Two Types: One Logic

We describe two types of models: theory of change and program. They differ by level of detail and use but represent the same logic. A *theory of change* model is simply a general representation of how you believe change will occur. A *program* logic model details resources, planned activities, and their outputs and outcomes over time that reflect intended results.

These two model types are different in their appearance and use. The level of detail and features distinguish theory of change and program logic models. Program logic models include more features than theory of change models. This concept of “view” is important and is discussed further in Chapter 4 because it influences the quality and utility of models. Theory of change models are conceptual, and program logic models are operational. Model types and their relative features are indicated in Table 1.1.

Relative to time frame, level of detail, volume of elements, display, and focus, the model types contrast. They are alike because they share the same research, theory, practice, and/or literature. Essentially, the types are different views of the same evidence-based logic that have a shared origin.

Model use differs in purpose(s). Theory of change models display an idea or program in its simplest form using limited information. These models offer a chance to test plausibility. They are the “elevator speech” or cocktail napkin outline of an idea or project. Program logic models vary in detail but offer additional information that assists design, planning, strategy development, monitoring, and evaluation. Program models support a display that can be tested for feasibility. They are the proposal version of an idea or project because they have fleshed out far more detail that often includes activities, resources, outputs, and other elements of interest to those creating and/or using the model. The relationships between elements, both the relative interaction and sequence, are valuable for understanding intended work and causal connections. They can be a huge help in creating action plans.

Historical Background

Use of theory of change and program logic models began in the 1970s. Carol Weiss (1995) and Michael Fullan (2001) and Huey Chen (2005) are among the

Table 1.1 Features of Model Types

Feature	Theory of Change Logic Model	Program Logic Model
Time frame	No time	Time bound
Level of detail	Low	High
Elements	Few (“do + get”)	Many
Primary display	Graphics	Graphics + text
Focus	Generic	Targets + specified results

pioneers and champions for the use of program theory in program design and evaluation. U.S. Agency for International Development's logical framework approach (Practical Concepts, Inc, 1971) and Claude Bennett's (1976) hierarchy of program effectiveness were among the earliest uses of the types of visual displays that have evolved into the program logic models we know today.

Logic models did not receive much recognition, however, until after the United Way of America came out with its publication *Measuring Program Outcomes* in 1996. This publication promoted the structures and vocabulary of logic models. The W. K. Kellogg Foundation also was instrumental in spreading the use of logic models with its *Logic Model Development Guide* (2001). For those readers interested in more detail on the historical evolution of logic models, see the references provided at the end of this chapter. Thinking about thinking, or metacognition, is present in many new management and leadership texts. Because our thinking affects our actions, it's an area that's well worth understanding better.

Examples

In the examples that follow, we briefly explain the general concepts and terms related to a theory of change and to a program logic model. Chapters 2 and 3 provide more depth. Although we show one of each type of model, it is important to keep in mind that these are but two examples from a much broader continuum of possibilities. There are many ways to express or display the ideas and level of detail.

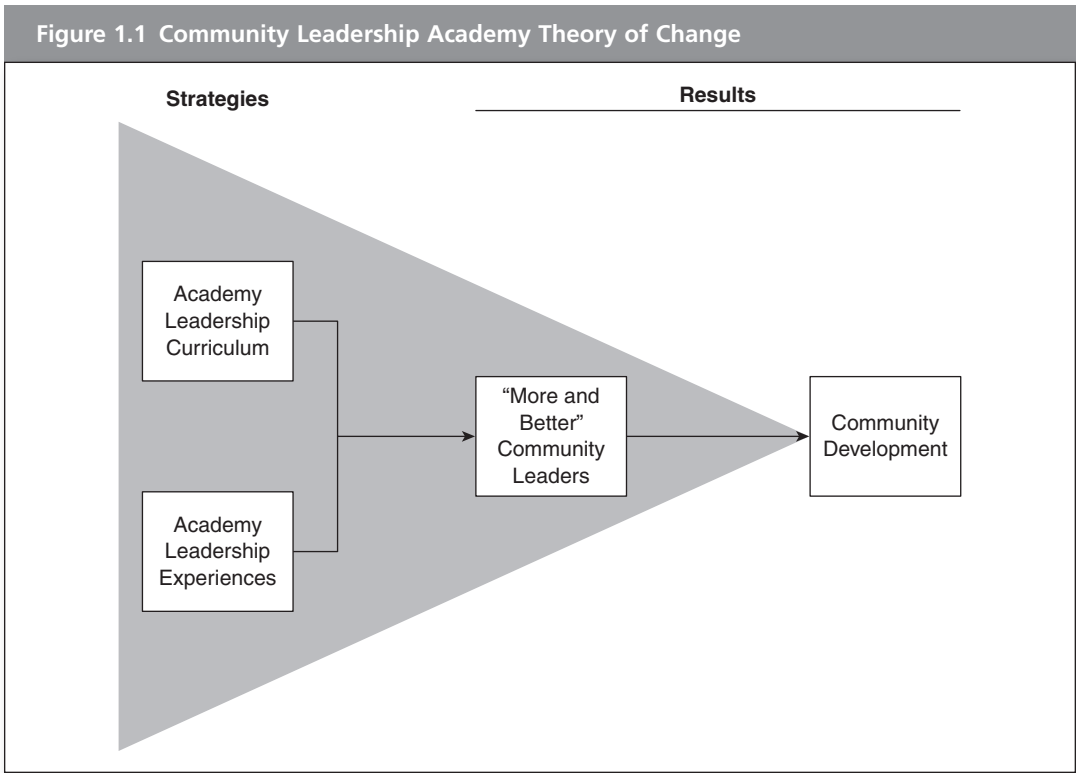
Theory of Change Model Example

Figure 1.1 shows a simple theory of change model for leadership development. Read from left to right, it suggests that some strategies, for example, curriculum and experiences, can positively influence people so they can more effectively tackle community challenges. This theory relies on the assumptions that training, experiential learning, and community orientation will have a substantial influence on individuals' skills and ultimately result in community development. It also relies on a particular framing of the "problem(s)."

Chapter 2 focuses on creating theory of change logic models. They are the critical foundation for any change effort. Often, these models exist as part of an internal mental framework that is "dormant" or undisclosed. They can also imply considerable knowledge, experience, research, and practice. The evidence base for theory of change models typically is not made explicit.

Program Logic Model Example

Program logic models inventory, from start to finish, a specified program effort. For example, a program logic model for a community leadership program (based on the theory of change) would include the specified resources/inputs, activities, outputs, outcomes, and impact. Resources or inputs are what are needed to ensure the program can operate. Activities are the tactical actions (e.g., events, services,



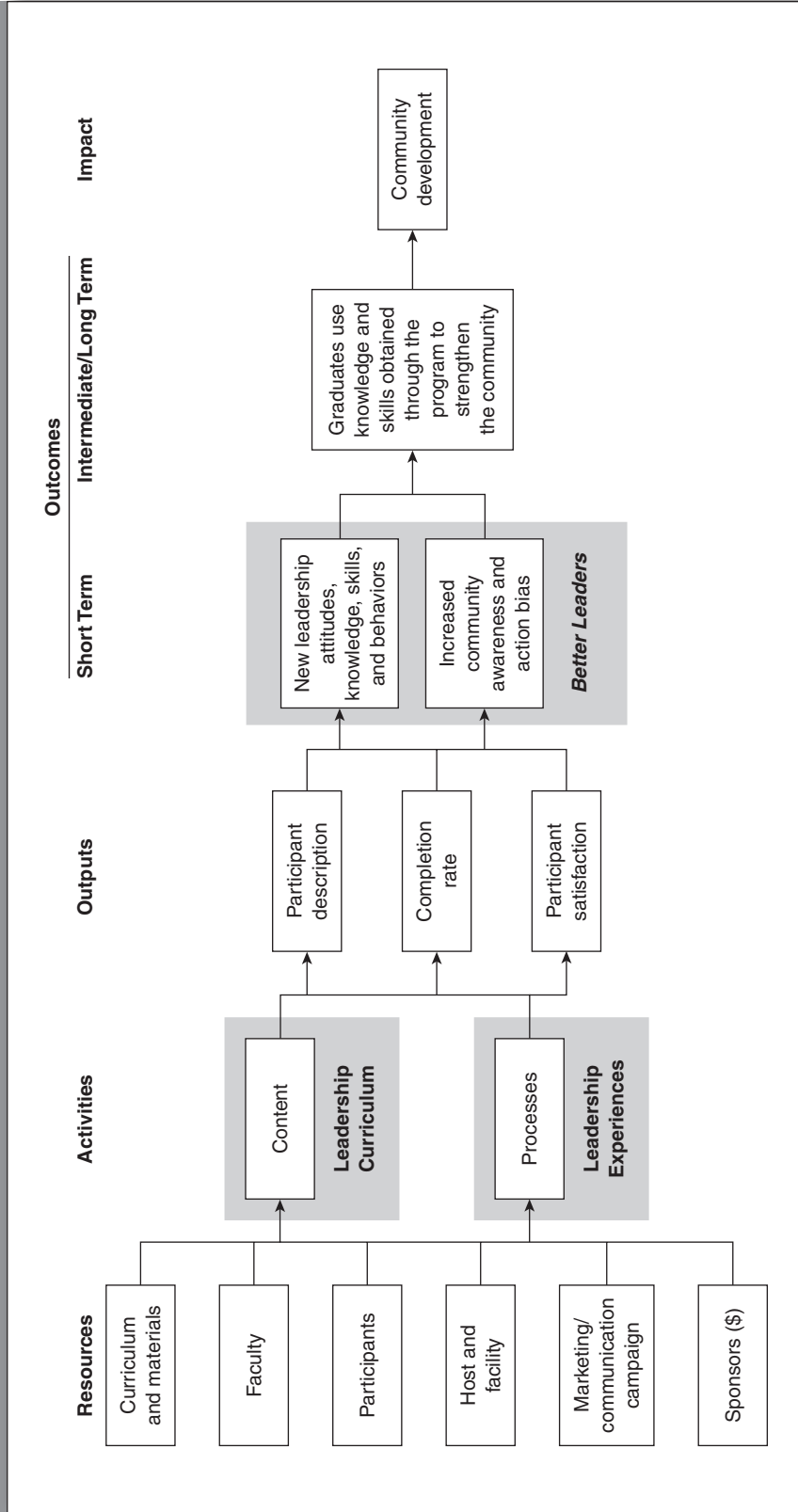
publications) that occur to fulfill the promise of each strategy. Together, activities make up the program design. Outputs are descriptive indicators of what the specific activities generate. Outcomes are changes in awareness, knowledge, skill, or behavior. The impact reflects changes over a longer period. Figure 1.2 displays a simple program model for the same community leadership program shown as a theory of change model in Figure 1.1.

This program model suggests desired results include more and better leaders and community development. It implies the leadership development agenda is about resolution of community challenges and that, if resolved, it contributes to community development.

To “read” this model, first note the intended impact (ultimate aim) of the program: community development. Then, move to the far left-hand side, where resources or inputs essential to the program are listed. Logic models employ an “if-then” sequence among their elements. When applied to the elements in each column, it reads, “If we have these resources, then we can provide these activities. If we pursue these activities, then we can produce these outputs. If we have these outputs, then we will secure these outcomes,” and so on.

This model is just one very simple representation of how a program might be designed and planned for implementation. Many variations on this example could represent program design and planning for community leadership development that meets standards of logic and plausibility. We know that Figure 1.2, in fact, represents a program with some definite flaws. More discussion about how the

Figure 1.2 Community Leadership Academy (CLA) Program Logic Model



program could be improved through a “mark up” (or critical review) that tests the program design is described in Chapter 4.

Program Logic Model and Evaluation Design

This guidebook also offers some support for using logic models to assist in evaluation design. This book will address only the framing of broad inquiry. At this level, evaluation questions are the foundation for evaluation design and planning. If we apply this to the community leadership program example, it is appropriate to focus on the program’s intended results. The summative evaluation question is, What difference did the program make in the community’s development? Perhaps a place to begin is in determining the contribution made by the program to the development of more and better community leaders. A clear, coherent program logic model provides great assistance during evaluation design. A model points out the key features and shows the relationships that need assessment.

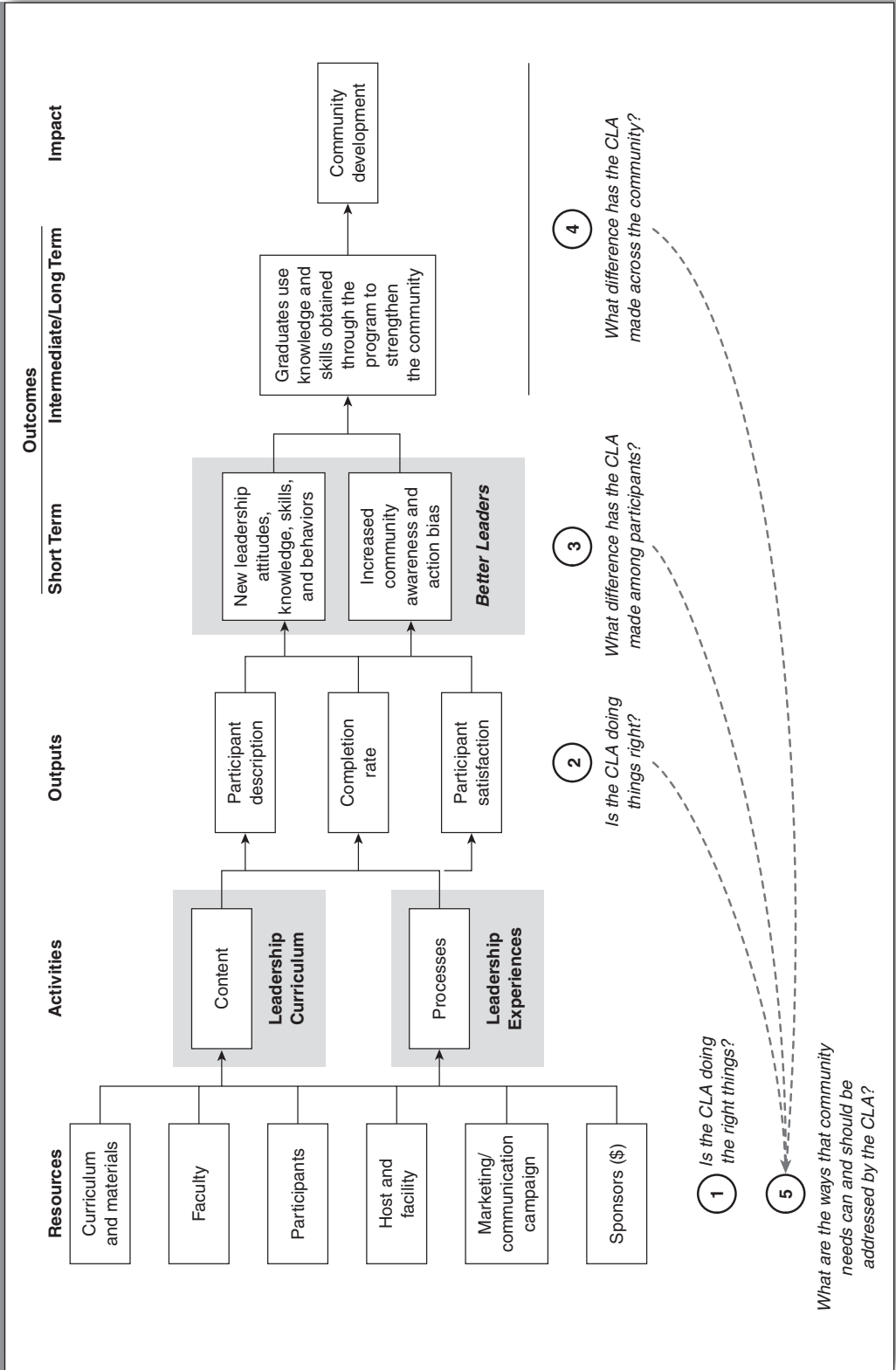
In this example, an evaluation could consider both changes in the awareness, knowledge, skills, and behavior of participants as well as the community development impact. Stakeholders (funders, participants, and other influentials) might also want to know about the content selection and quality of training. They might be curious about implementation fidelity and adaptation, too. Figure 1.3 demonstrates a program logic model with typical evaluation questions.

This program logic model is serving evaluation. The five key evaluation questions are applied at specific locations on the illustrated program model. Key questions for the Community Leadership Academy (CLA) displayed include

1. Is the CLA doing the right things?
2. Is the CLA doing things right?
3. What difference has the CLA made among participants?
4. What difference has the CLA made across the community?
5. What are the ways community needs can and should be addressed by the CLA?

Positioning questions on the program model identifies where evaluative evidence might be found to address inquiry. Labeling on the model also helps to establish the relationship between program, implementation (processes), results, and evaluation. Question 1 “tests” the logic constructed during evidence-based planning. This question requires thoughtful connections be drawn across activity accomplishment, implementation fidelity, and the attainment of desired outcomes/impact. It addresses the overall effectiveness of the selected strategies and the related action in achieving the desired results. Question 2 examines implementation fidelity/variance as well as the scope, sequence, penetration, and quality of activities. Questions 3 and 4 focus on the extent to which outcomes and impact have been achieved. Question 5, like Question 1, should span the whole model to surface program improvement needs. Questions 1 and 5 are more reflective but are essential to improved effectiveness.

Figure 1.3 Community Leadership Academy (CLA) Program Evaluation Model



These evaluation questions can be very helpful in the initial design and development of the program, as they help to aim the program intervention. The next step is establishing indicators. Models also help in guiding the conversation and exploration needed to determine indicators or the measures of progress for an effort. These issues are addressed in greater detail in Chapter 5.

Limitations of Logic Models and Modeling

It is important to note that the proper reference, “logic model,” is *no guarantee* of logic. While many models do demonstrate some modicum of logic, a logical representation does not equal plausibility, feasibility, or success. There is some danger in seeing a graphic display on paper and considering it “true.” This notion of omnipotence stems from limited domain knowledge, vested interest, and lack of perspective. Typically, models do not take unintended consequences into account, although every program has side effects. The modeling process usually does not include program critics, and most stakeholders are not likely to be grounded in the research literature.

Realistically, even when program theory and logic are constructed and build on the insights of broad representative stakeholder groups, can anyone be sure who is right? Every model should be considered a draft. They are deterministic, incomplete approximations of what usually are more open systems. They provide the simple illustration that makes evaluation and program improvement more accessible to individuals and groups. The mere existence of a model does not mean that the model or the plans it represents are ready for implementation or that it will readily deliver the intended results!

Chapters 2 and 4 tackle model improvement and development in greater detail. It is essential to note that a model is a graphic display of the program captured at one point in time. Models, we believe, should change to reflect best thinking and current evidence as these evolve. Creating and displaying variations of a model are experiences that can develop thinking about strategies/activities and results. This development is a critical process in model quality and, ultimately, in the feasibility of the efforts described.

We believe the greatest value of logic models is their use in an iterative, intentional process aimed at improving the thinking they illustrate. This is best done through a facilitated sequence with selected stakeholders. Obviously, logic models do not ensure plan implementation fidelity or quality. Nor do they remedy any of the many concerns about organizational structure and culture that can deeply affect program and organizational effectiveness. Important action steps associated with quality include identification of both assumptions and evidence used in models.

Models Begin With Results

Determining the results you desire is the first step in effectiveness, because knowing where you are headed is critical to picking the best route to use. In our experience, models begin with results. Results consist of outcomes and impact; each appears in a sequence over time. While impact is the ultimate end sought, sometimes synonymous

with vision, outcomes are earlier indications of progress toward results. We think results are the place to begin when you are struggling with choices about strategies (with a theory of change) or activities (with a program logic model). It is important to avoid moving prematurely to specify what you want to do. In any change work, program design, or problem solving, specifying those outcomes most likely to occur soon and then those that will take more time to emerge helps determine what route (action path) might be best to use.

People commonly complain their work is both activity focused and frantic. Considerable time and effort are spent on a flurry of tasks that frequently lack a clear relationship to intended results. Logic models can assist in sorting priorities because they both rely on and help build a visual literacy that makes action and expected consequences clear. Through the models and modeling, stakeholders can identify potent strategies/activities likely to contribute to the results sought. And those with less (relative) value can be sidelined or discarded.

Logic Models and Effectiveness

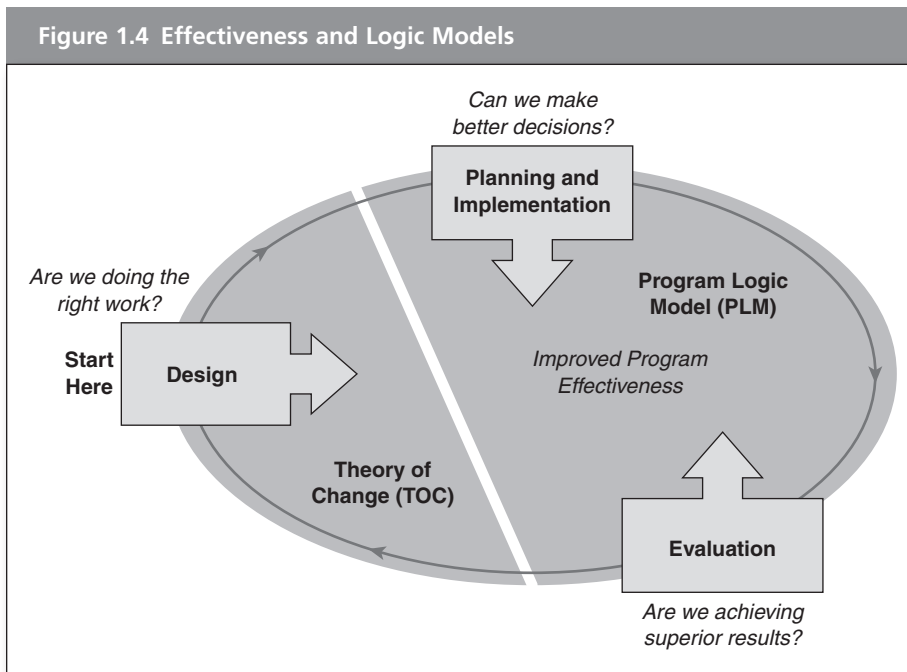
In the workplace (and in life), almost everyone is interested in effectiveness. To that end, we provoke important thinking when we ask these questions:

- Are you doing the right work?
- Can you make better decisions?
- Are you getting superior results?

All of these questions apply in any context—whether it is in government or in the private or the nonprofit sector. They are among the most critical questions for managers and leaders because they focus on key levers that influence performance. We know from practical experience and assessment that doing the *right work* along with *great decisions* secures *superior results*. Logic models can help with the design that ensures the right work, the plans and implementation that reflect better decisions, and the evaluation that tests both pathways and progress toward success. For these reasons, they are an exciting tool and process for anyone interested in more effective programs, projects, and organizations.

Figure 1.4 demonstrates key points of the design, planning, implementation, and evaluation that the two types of models can support. Theory of change models are most helpful during the design of a program or project. As plans or evaluation require greater detail, program logic models can make a substantial contribution to these later stages of work. The types of models and their uses form a continuous loop that can provide feedback about a program throughout its life cycle.

Logic models as both a tool and a strategic process offer considerable value to programs and, subsequently, organization effectiveness. They can be used for different purposes at different times in the life cycle of an idea (program, project, or change effort). Theory of change models can dramatically influence program planning because they rely on knowledge to offer choices about doing the right work. In this stage, the selection of strategies relative to results occurs. Program



logic models help with more precise decisions about which activities in a given strategy are most effective. Program logic models can also be used to support evaluation design. They can assist in pointing to optimal areas of inquiry and help to determine whether progress is being made and what difference has occurred relative to results.

Some organizations use logic models routinely. They can become a standard tool that promotes alignment and synergy. For example, evaluation can be designed and implemented more easily when a clear theory of change and program logic model have already been determined. These tools and related processes can also assist learning and dissemination in significant ways. Logic models and modeling can be vital elements in performance management because they rely on evidence, support informed decisions about strategy, and assist with assessment. Performance management seeks predetermined results and adapts actions to obtain them.

IN SUMMARY

Logic models are simply a visual display of the pathways from actions to results. They are a great way to review and improve thinking, find common understandings, document plans, and communicate and explicate what works under what conditions. We think theory of change models are distinct from program logic models in several important ways. Theory of change models present a very high-level and simple explanation of “do and get.” Program logic models offer a detailed

map that can be implemented when supplemented with work plans. In this chapter, we also distinguished between models as tools and modeling as a process. A quality feature of logic models is that they are evidence based. Logic models can be used for learning, improving, and greater effectiveness.

LEARNING RESOURCES

Reflection

1. In what circumstances can you use logic models in your work or field of study?
2. What benefits does each type of model provide? And to whom?
3. What do logic models display? And what is missing?
4. How are theory of change models and program models alike? Different?
5. What kind of logic models have you seen before? Which are most commonly used?
6. What current models/processes are commonly used for program design in your organization? What work cultures are best suited for logic models?

Application

Select and draw one of the following: promotion of a new brand of ketchup, a driver's training program, or a domestic violence awareness campaign. Have others independently draw the same project you select. What do all the drawings have in common? What areas are different? Why? When and how do these differences become reconciled? How did the levels of detail differ among the drawings? What can these drawings tell us about mental maps?

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2

Building and Improving Theory of Change Logic Models

This chapter identifies the basic elements of a theory of change logic model. They are evidence based and plausible. This chapter describes the steps to create and improve a theory of change model. It also names criteria for a “good” model.

LEARNER OBJECTIVES

- Identify basic elements of a theory of change model
- Identify the contributions a theory of change model lends to a change effort
- Create a simple theory of change model
- Apply critical review for theory of change model plausibility

Logic models offer an exciting way to combine narrative and graphics to display the mental maps people hold about a specific program or change initiative. These mental constructs are also sometimes called “idea maps.” While the process of creating a model can be solitary, there are significant benefits when models are generated in a small group among stakeholders with a shared agenda. Logic models can be used over the entire life of a change effort—their boundaries should be consciously determined by the participants who create the model.

Building a Theory of Change Model

Getting Started

While logic models can be used for many purposes, there are two basic types: theory of change and program models. Understanding these types is important to their development and use. The choice of which to use reflects whether the model

needs to describe broad and general concepts about change or more detailed operational elements essential to design, plans, and management. It is possible to begin with either a program logic model or theory of change model.

We believe it is important that a program model always accompany a theory of change because the assumptions held in the theory of change have fundamental value for program operations and success. These assumptions should be consistent and anchor choices made in the development and selection of strategies to fulfill intended results. When assumptions are evidence based, then a single coherent logic and alignment can occur that enables success. Relying on knowledge, whether theory, research, practice, and/or literature, is essential to a good model.

Preferences and Styles

People vary considerably in what level of detail they prefer to describe their mental maps. This is an important consideration for those who lead the modeling process. Invariably, any small group will include people with a strong preference to start at a broad, high level and those who feel far more comfortable beginning with detail. Both approaches have value because the best program or change effort design eventually should display models with these features. Accommodating differences in how any individual approaches the display task is a common tension in the creation process.

Our aim is to guide you consciously from big ideas to finer points. For this reason, we provide a theory of change model description and example first, then a parallel representation of a program logic model in the next chapter. So that content matter does not confound the process, we have chosen to use community leadership development and health improvement for all model content in Chapters 1 through 5. A broad range of subject content is offered in the models found in Chapters 6 and 7.

Evidence Based and Plausible

Theories of change can be grounded either in an established claim with proof or in a hypothesis. Programs based on proofs are a replication of something that has worked. Hypotheses are rationales based on research literature that show promise of working and are therefore something worth trying. Programs based on hypotheses are innovations. If the theory of change is supported by a body of evidence, there is a stronger chance that the strategies chosen will secure the desired results. Frequently, however, this “standard” is overlooked. In the urgent fever to get to implementation, the design and plan quality can be shortchanged and rely, instead, on faulty assumptions, old practice, or little or no evidence.

We suggest practitioners construct the theory of change model with grounding it in literature, experience, or other evidence that promotes plausibility. Most theories of change will exhibit some degree of logic. Plausibility, however, is a more appropriate litmus test for work that has inherent opportunity cost. Later, in Chapter 3, we suggest that the program model must also be feasible if there are authentic intentions of securing results. During the construction of a change model, it is important to explore or discover what works under what conditions.

This is about the choices made in selection of strategies relative to anticipated and therefore planned results. When constructing a program logic model, the realistic criterion of limited resources is also in play. Any program, project, initiative, or organization has some limits on time, talent, and financial resources. In the migration from theory of change to program logic model, users can shift their thinking from what “could work” to what “should work.”

The Big Picture

A theory of change logic model offers the big picture of strategies that could generate your intended results (or impact). This construct is illustrated by Figure 2.1.

A basic theory of change model contains just two elements: strategies and results. The intent is to illustrate the connection between what you will do with what you hope to get.

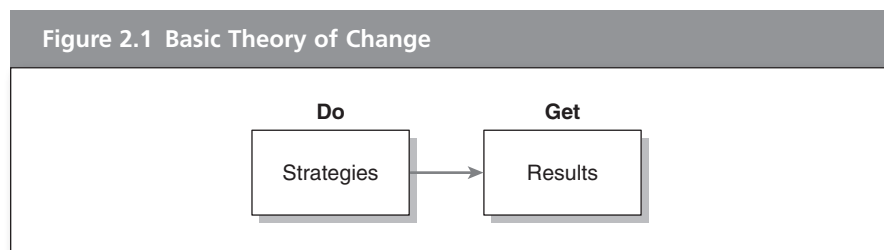
Strategies reflect a choice of optimal actions (via activities or tactics) to secure intended results. They represent an allocation of resources focused on a clearly defined objective. Marketing, training, political advocacy, and fund development are examples of common strategies. This element describes your actions or what you plan to do.

Strategy is the overall plan that gives coherence and purpose to the specific actions that organizations undertake. For some nonprofits, however, the meaning can be murkier and framed as an ambiguous aspiration. When we use the term *strategy*, we rely on an implicit but evidence-based assertion that connects means and ends. Wherever the word *strategy* appears in our illustrations and narrative, we assume that the “case” for selection is sound—in other words, that it has strong potential to secure impact. Later, in Chapter 3, we also use the term as an umbrella for nested clusters of activities (or tactics) that aim at specific single outcomes or clusters of outcomes.

Results reflect the long-term effect of strategies. They are the “get” from what we are doing. Results are ultimately secured through the change(s) generated by the preceding strategies. They can reflect a single outcome or multiple outcomes over time.

Multiple Strategies and Results

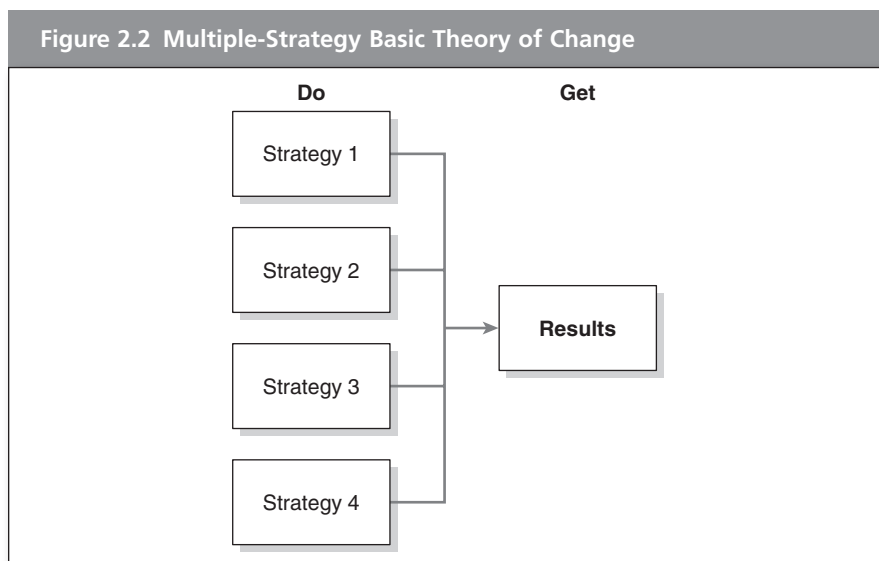
In reality, many programs are more complex than is shown in Figure 2.1. Most often, several strategies combined (over time) in a particular sequence yield results. And we generally both create and experience results as the net yield of several strategies working together. When displaying theory of change models, this can be

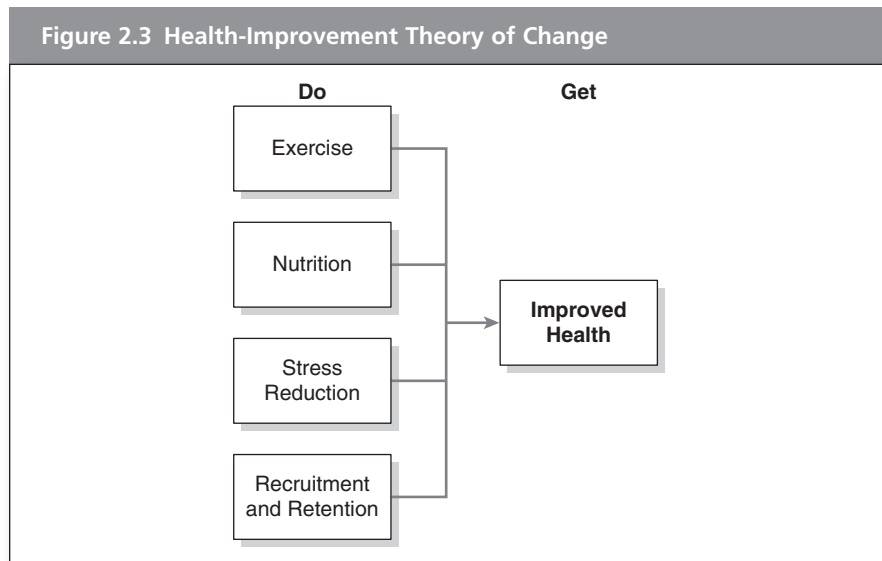


challenging both to conceptualize and to represent. For example, to become proficient in a new language, it is most likely the combination of instruction, practice, and cultural immersion that generates proficiency. Likewise, to be a profitable cereal company may require a high level of competency in research/development, marketing, production, and distribution strategies. In addition, great health outcomes for neurosurgery may rely on expertise in diagnostics, surgical techniques, pre- and postsurgical care, and rehabilitation therapies. Because multiple strategies often contribute to results, a more complex representation of a theory of change might look like Figure 2.2. We call the path from each strategy to result a “strand.”

Recall the theory of change model for the Community Leadership Academy (Figure 1.1). In that example, the outcome desired was more and better community leaders. This model described two simple strategies as essential contributions to the recipe: curriculum and experiences. An applied example of a multi-strategy model for securing improved health is displayed in Figure 2.3. Read from left to right, the theory of change suggests *if* we provide exercise, nutrition, stress reduction, and some other key strategies, *then* we will secure improved health for participants who follow the program. It is also important to note that strategies may interact (although not shown here). This theory of change represents a generalized construct for many health-improvement programs.

Figure 2.3 simply provides a gross summary of strategies and intended results for a health-improvement program. A theory of change model displays some of the underlying assumptions about change and is a view at 65,000 feet. This view is how a farm looks from an airplane window in contrast to the view from a tractor seat. It simply shows the specific strategies that the designer believes will achieve a desired result. Theory of change models are distinct in that they include assumptions (either explicitly or implicitly), offer the big picture of the bounded mental map, and name impact. Theory of change models do not provide the detail essential to action planning, implementation, or evaluation. They simply state what you plan to do and





what you expect to get. It is easier to explore ideas and manipulate them at this stage. The why and how of these models are embedded in assumptions and eventually reveal themselves in the strategies selected. For example, in Figure 2.3, some of the underlying assumptions might include the following:

- Increased exercise and improved nutrition are known to contribute to improved health.
- Only those who participate in the program will achieve results. Participants need to be recruited.
- Stress may be a contributing factor to poor health.
- Participants' fidelity to the program is critical to achieve results. They will need parallel increases in awareness, knowledge, and skill in order to change behaviors that most impact health.

Realistic Models

Theory of change models should demonstrate plausibility. This means they “could work.” Given the realities of limited time, as well as human and social resources, logic alone is inadequate. In fact, the logic displayed in a model can be uninformed or misinformed. For example, world peace is a tangible and clear desired result, but a theory of change that relies solely on communication (e.g., newsletters and websites) is not plausible in securing world peace. Or consider the desired result of hiring more mid-level scientists at your research institute. Are outreach strategies with local math and science teachers and students logical action steps? Yes, but meetings with those targets can be helpful only in a pipeline that can tolerate a decade of delay. It is not a best strategy given urgent human resource needs this week and next month.

Knowledge and Assumptions

So far, we have described a basic theory of change model for improved health that is specifically composed of *doing* (strategies) and *getting* (results). Each of us brings along some other contributions to our theory of change that are more closely held. While not often named, we commonly bring what we *believe* (our assumptions) to theories of change, too. The most viable assumptions used to select strategies are rooted in knowledge, and that knowledge generally includes research, practice, and theory. Figure 2.4 illustrates the knowledge base for beliefs that precedes assumptions and strategies in a theory of change.

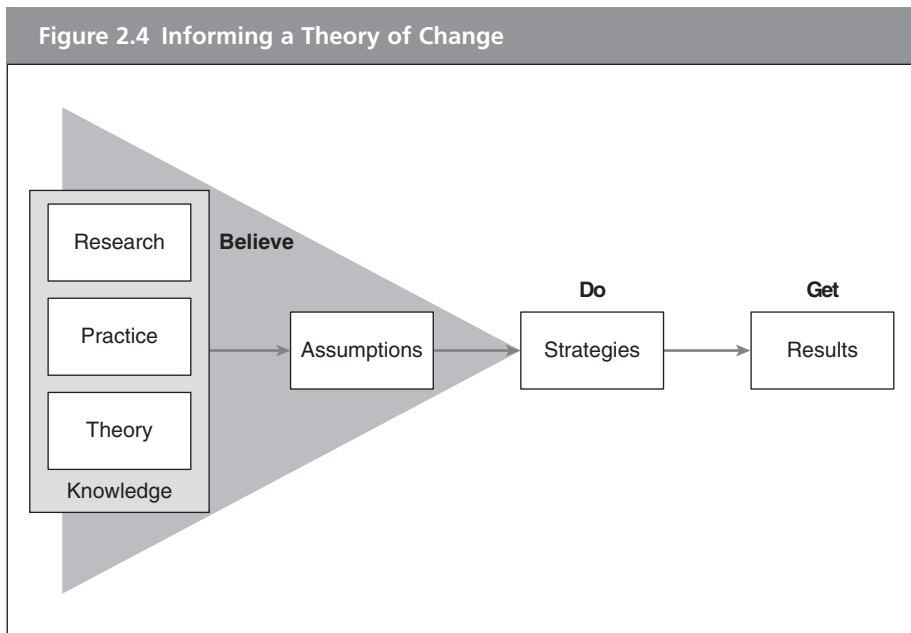
It is critical to recognize the role of beliefs. They are important determinants in choices about strategies for both creating and improving a theory of change model. Figure 2.4 illustrates how knowledge and beliefs contribute to a program's underlying or driving assumptions. Assumptions are often informed by knowledge, which can include research, practice, and theory. We find that making assumptions explicit can improve our chances for program success. Sometimes assumptions are informed by experiences, habits, or values that do not also reflect knowledge. Mediating or moderating factors such as program context are useful to consider as barriers or facilitators to program success at this stage. Dogma, misinformation, ignorance, and wishful thinking are hazards here. Often, assumptions can differ significantly among and between both stakeholders who create and those who execute. They can also dramatically affect how problems are identified and framed. For model utility, it's important to cite what problem(s) we're trying to solve and find a way to frame a problem so that it is meaningful to others.

Modeling can help surface vital differences among stakeholders and offer a disciplined process for resolution based first on plausibility, then on feasibility during subsequent versions. This is why, in part, modeling offers considerable value beyond the construction of models alone. It's important to note that dialogue is critical to exploration of knowledge and assumptions that are embedded in models. Engaging multiple stakeholders is critical to quality as well as meaning.

However, modeling can be an uncomfortable process because it nearly always raises differences among participations' perceptions, experience, knowledge, training, and other factors. Identifying and negotiating these can be challenging. This navigation is most easily done with external assistance. If not, then it can be useful to explicate the criterion for decisions about model content and display. Simply who participates in modeling can be loaded with politics, since it will very likely influence the model content.

Action Steps: Creating a Theory of Change Logic Model

We recommend that people begin building a theory of change model by specifying their intended results. Most often, it is easiest to be clear first about the intended results. Our experience with clients is they *know* what they want to accomplish. They often label this as desired results.

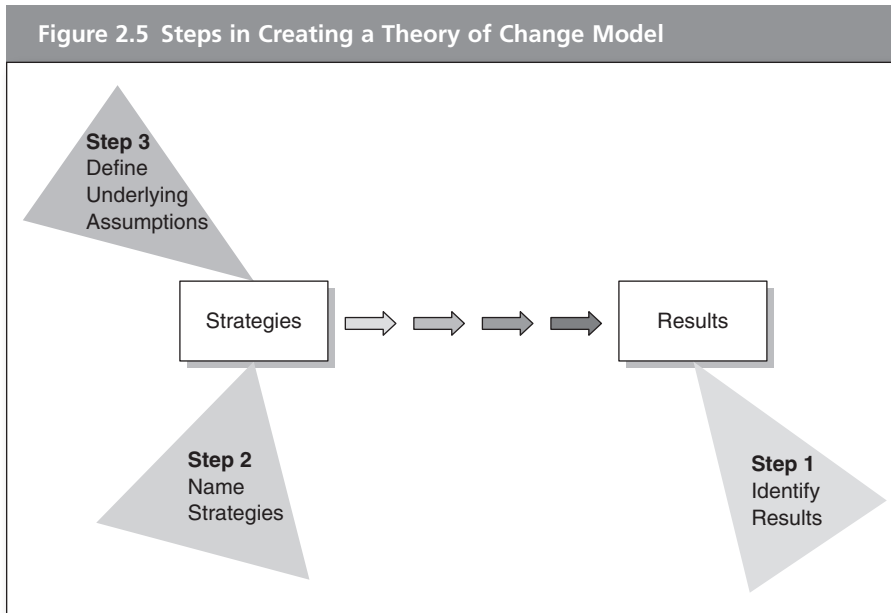


Once results are named, we suggest identifying the strategies required to achieve the results you seek. Strategies are about *how* intended changes will occur. And assumptions are the preceding knowledge: the research, practice, and theory that inform choices about strategies. They significantly influence which strategies are chosen as pathways to your intended result.

So the steps to generate a theory of change logic model are ordered in this way:

1. Identify results desired.
2. Name the strategies that will deliver your intended results.
3. Define the assumptions (see Figure 2.4) that support your specified strategies.

Figure 2.5 displays these actions in a three-step sequence. Most theory of change models generally do not display underlying beliefs or assumptions. Nevertheless, these are important elements to explore consciously when creating a theory of change. We suggest those assumptions are named in association with the theory of change. Assumptions can simply be a bulleted list on the same page or reverse side. Remember, a theory of change model is simply one representation of the “truth,” not a substitute for it. The model draft becomes a place for starting discussion and testing meaning, coherence, assumptions, and plausibility. Engaging others in modeling offers the opportunity for critical review and improvement over time through the generation of versions. By starting with a theory of change model, it is easier to arrive at shared understanding of what your program will do and can achieve.



Improving Theory of Change Models

We offer several common processes to consider as you explore iterations of your theory of change model. While improvement is definitely not limited to these suggestions, an application of these four will likely contribute to the development of any attempt:

- Engage multiple stakeholders.
- Share explicit assumptions.
- “Toggle” or test alternative content in model versions.
- Explore promising practices and consider benchmarking.

Multiple Perspectives

People hold and operationalize theories of change in both their work and personal lives. Most experienced parents, for example, have a recipe that contains the primary strategies they believe are vital to parenting a “good kid.” Parents can vary considerably, however, in what they mean by a good kid. Likewise, even if we agree on what a good kid might know and be able to do, it is highly likely that from one parent to the next, there will be many variations on parenting strategies to ensure the “good kid” result. This example suggests the considerable importance of ensuring that all stakeholders in your program or change effort are specifying results and the strategies needed to get there with the same meaning and level of specificity. Developing and improving the theory of change for your program is one way to begin the conversations needed to reach shared understanding.

In the health example we started this chapter with (see Figure 2.3), we identify improved health as the result sought. It is important to ensure that everyone has a

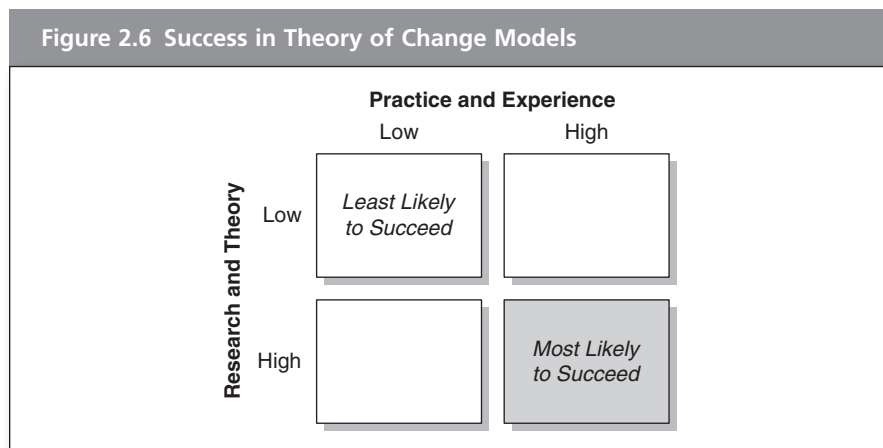
highly consistent understanding of what “improved health” means. To one participant, it may be weight loss. Another could interpret it as normal blood pressure. Others may feel improved health is a combination of several positive outcomes. If you ask a half-dozen people what improved health means to them, it is quite likely there will be variation in their individual answers.

Specifying what the results mean, such as improved health in this example, becomes critical for your program design as well as essential for measuring progress toward and determination of results. If the meaning and measures of results are shared and understood similarly, then it is more likely strategy choices will align with your intended impact. It is more likely indicators of progress will be appropriate, too.

“Unpack” and Share Assumptions

The most significant opportunity to improve theory of change models lies in unpacking the knowledge and beliefs employed in assumptions. This means, in practice, that any theory of change for a program or social change effort should be grounded in knowledge. If results are connected to strategies that reflect research, practice, theory, and experience, there are far greater chances for success than with strategies that lack this grounding. Figure 2.6 displays a combination of the elements found in knowledge. A combination of little or no practice, experience, research, and theory in your model means the effort it represents is an idea that may be highly innovative but is not likely to succeed. A combination of practice, experience, research, and theory in your model suggests the effort it represents is more likely to succeed.

The best theory of change model *deliberately pursues* alignment among research, theory, practice, and experience. The stronger models build on the knowledge and good work that precede them. These substantiated models and their associated programs or social change efforts gather and then use codified knowledge from prior efforts to inform effective program design. Figure 2.6 describes the geography of choices and emphasizes that relative success relies on a depth of practice, experience, research, and theory.



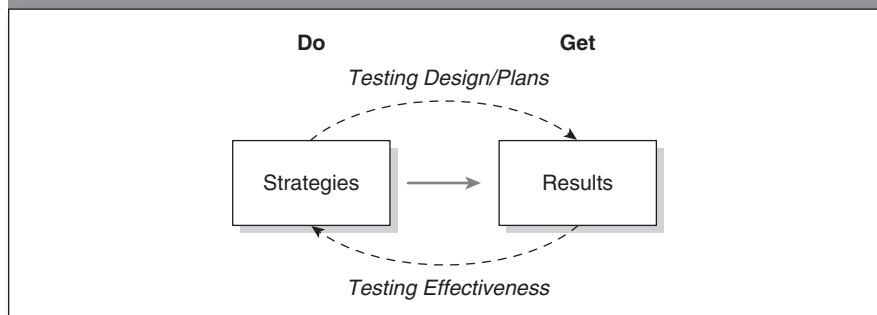
Toggling

Another practical way to improve models is what we refer to as “toggling.” We define toggling as finding the optimal fit between a selected set of strategies and plausible results. For example, options to improve school nutrition could include planting a garden, removing vending machines, or changing the lunch menu. Toggling “tries on” options and makes a best choice. In this critical review, the model builder is experimenting with the best combination of strategies to secure the results sought. Inviting others to join in this iterative tactic in real time can be very productive. Sometimes it is best to refine or focus the specified results. For example, a program or social change effort could specify one of these results: “end childhood obesity” or “create schools with improved nutrition choices for children.” During toggling, it may become apparent the result is not plausible. Often, ambitions are greater than what is feasible. It is important to guard against grand ambitions. They are possible hazards that can result in flawed models. Figure 2.7 demonstrates the interactions between strategies and results as choices are made in the final determination.

This figure displays the testing that occurs in an effort to determine the best combination of strategies to secure your intended results. Once a preliminary theory of change model is drawn, the modeling process begins. The model is tested through iterative cycles of inquiry. The basic questions addressed are “Are the results focused and narrow enough to discern optimum strategies?” and “Is the connection between the strategies named and the results desired as strong and direct as needed to be effective with the population of interest?”

Toggling can also involve a review of both the duration and sequence for chosen strategies. The objective is to specify a model that is plausible. The specifics of what is feasible are developed in the program logic model (and are discussed in following chapters). People sometimes mention confusion when they talk about the “fog of war.” In our experience, there is considerable “fog” or ambiguity in program design and planning. A clear and plausible theory of change is the foundation of intended work and requires considerable attention and scrutiny. Just as with the Cheshire Cat in the story *Alice in Wonderland*, if you do not know where you are going, any road will do. Fuzzy, ambiguous theories of change rarely net the success intended.

Figure 2.7 “Toggle”: Improving Theory of Change Models



Promising Practices and Benchmarking

It is valuable to explore strategies and results of programs (or social change efforts) similar to yours. A better understanding of the rationale for their strategies and related results can deeply inform your design choices. In the private sector, this is often referred to as “benchmarking,” a systematic discovery and comparison process that can be a simple way of *both* clarifying and improving your design early on. In benchmarking, one simply looks around at promising practices to inform and then make good choices about your own. Benchmarking may include a review of documents, a survey, and discovery with peers/competitors. It establishes the status of other efforts, programs, or organizations on specified features or issues. The big questions benchmarking can help answer are what others are doing and why? Chapter 7 provides some examples of archetypes, general recipes that are evidence based, that can also help in your early efforts to construct a model.

School-improvement efforts, for example, often include quality instructional and assessment practices among their many strategies aimed at teachers to, ultimately, improve student academic achievement. There is evidence these strategies can positively influence student academic achievement. It follows that a school-improvement effort, then, might be more successful if these strategies (or some adapted version) are included in the program plan. The converse is also true. A school without these strategies as standard operating procedure or as part of a new plan is less likely to secure improved student academic achievement. A theory of change can show what you are and are not thinking about. The accompanying modeling process provides the opportunity to reflect and improve on the underlying logic for your program.

Group Process

Consider involving others in co-creating a theory of change model. Let’s build on the improved health example from earlier in this chapter and aim at obesity prevention. How could you guide a group in exploring a countywide program design intended to maintain healthy weight and prevent obesity? In tackling this question, it’s important to anticipate the need for data prior to the convening. Gathering and sharing information about research, practice, and theory makes for a much smarter dialogue. It’s also possible to include experts who bring data and field experience literally to the table. In general, a guided group process could follow these action steps in a daylong work session or over a series of meetings.

Remind participants, again, of the intention of the work to establish a theory of change that articulates a single relationship between results and strategies. The assignment is to identify strategies most likely to get the planned results given the context, target audiences, and other factors. So it’s important, first, to secure a shared understanding of the results intended. Ask all the participants, on their own, to identify the result they want the program to achieve in the next 3 years. It’s vital to specify a period to bound the program effort. Have participants post directly (or transfer) their intended results for public sharing. This first posting will likely display a range of expectations and assumptions about what results are desired. Reconcile those that are similar and do discovery on what’s “underneath” the postings.

Through dialogue, find the result that the group believes is most feasible given the context. Features of context might include historical and current rates of obesity and overweight, definitions of those terms, an inventory of physical fitness options and their physical proximity, socioeconomic data for the county population, and access to healthcare and weight loss resources, along with aspects of prevailing culture. Create a list of resources, including specific funds that could be designated for the program. Your participants can probably name many other features of context. These are the influences as well as data that help to inform the current reality. It may help to post facts and features of context so they are present to dialogue. This portion of the process should rely on facts as well as perception.

Then, consider your target audience(s). Will your program effort be designed to influence males, females, teens, young adults, all residents between 10 and 50 years of age? Or some combination of these characteristics? Employ learning from the context discussion to inform your choices. Be aware the selection you make may require you to adjust the group's intended result. The effort to name and understand the results is well worth the effort because it frames subsequent action steps.

Last, ask participants to name strategies that the program should include. Post them. Often, people will name tactics or specific activities. Getting to the same level of detail just requires some modification. This is another great opportunity to insert more information. For example, identify independent research, practice, and theory shown to influence weight management. Share some benchmarking information from effective programs that have already tackled this same challenge and those that failed to make progress. Be sure to include their costs and related organizational resources.

Ultimately, the group should determine a clear list of strategies and specified results that are not simply feasible but optimal—that is, highly likely to secure the impact. This may require some “toggling.” Use the Guiding Questions (below) to critically review the work of the group. Look forward to Chapter 6 and review the New York state Healthy Weight Partnership. It offers some great ideas about strategies and results (defined by their mission and vision). The NY model cites target sectors/settings to segment their program plans since the work is focused on all state residents.

As you construct, then review a theory of change, the following questions may be useful:

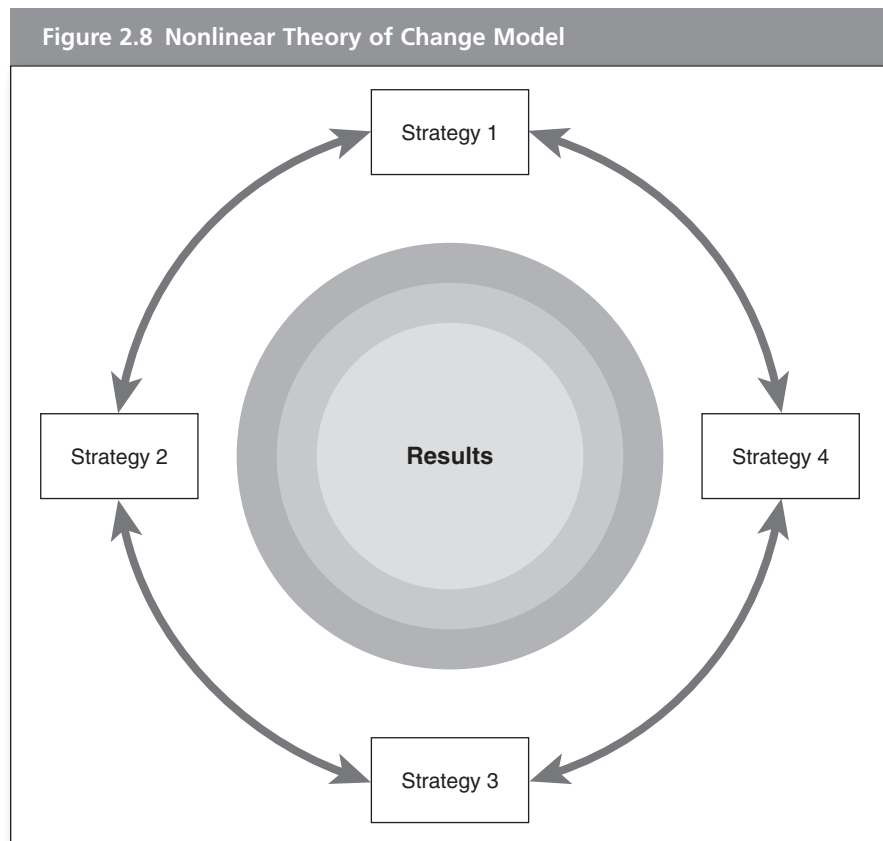
Guiding Questions for Reviewing a Theory of Change Model

1. Are the results specified with shared meaning among all stakeholders?
2. Did we uncover our assumptions and carefully examine research, practice, and theory as the grounding for our choices in strategies?
3. Did we “toggle” between strategies and results to ensure plausibility given our assets and limitations?
4. Have we carefully reviewed similar programs to learn what strategies worked under what conditions to secure results?
5. Does the model clearly show the relationship of strategies to results?

Nonlinear Theory of Change Models

Theory of change logic models are not always displayed in a linear fashion (as they have been in the text so far). Realistically, few theories, programs, or change efforts occur in a precisely linear sequence. The world is much more complicated and integrated than the simple, step-by-step actions and reactions as drawn here. Most change occurs iteratively, or in cycles, and with multiple interactions among many features. Any change is also connected to a much larger system than illustrated by the theory of change model. In our experience, systems and holism can be difficult to manage and even harder to evaluate or communicate. In generating a theory of change, it is important to represent how change occurs as an aspect of a far more comprehensive and vast geography. When using a systems view, it is important to consider the key leverage points or strategies that are most influential given time, expertise, and resources. A simple example of a nonlinear theory of change logic model is shown in Figure 2.8.

In Figure 2.8, the four strategies that contribute to results occur in a specific sequence over and over again. Their interaction contributes to the center target: results, an aggregate of progress over time. The intersection and influence of external issues and/or the environment can be illustrated as well.



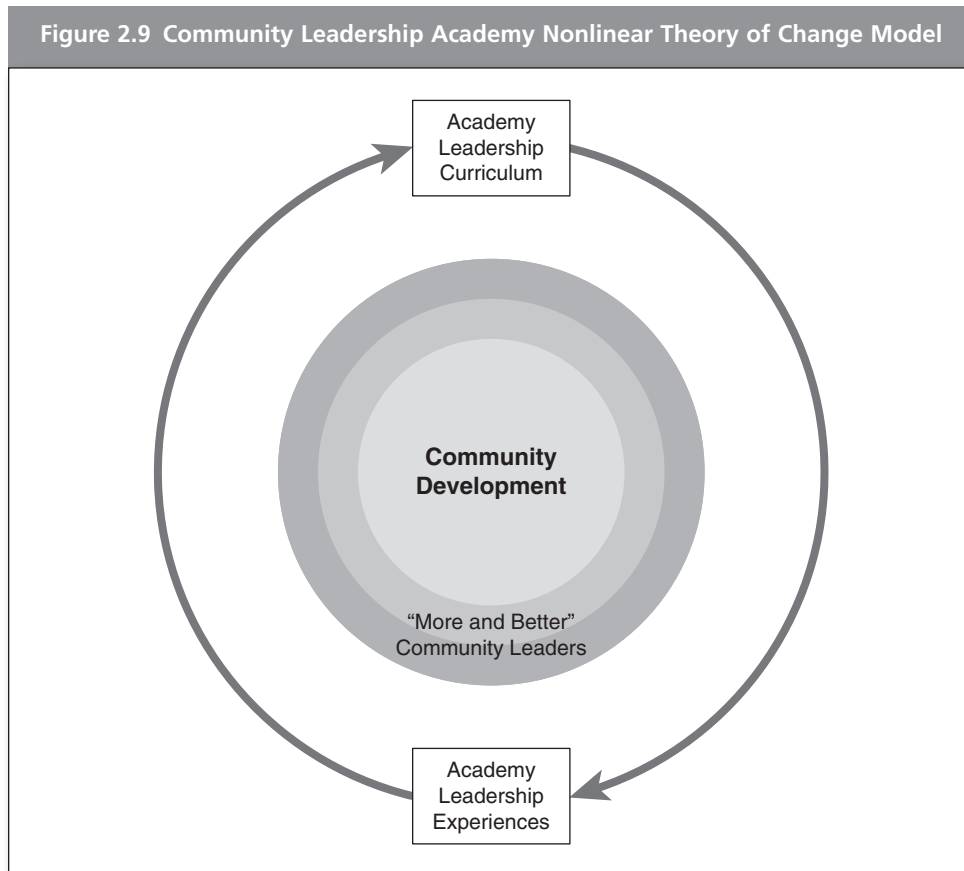
In the nonlinear theory of change model, Figure 2.9 represents an alternative view of the Community Leadership Academy theory of change model shown earlier. Through two strategies identified here—curriculum and experiences—this change effort expects to produce more and better community leaders and, ultimately, community development. The curriculum, the experiences, and the participants interact. Chapters 6 and 7 also provide some additional examples of nonlinear models.

Doing the “Right Work”

In Chapter 1, we mentioned effectiveness and three critical questions:

- Are you doing the right work?
- Can you make better decisions?
- Are you getting superior results?

The first question was about the right work. This is about attending to making the strongest, most direct and plausible connection between your strategies and results. It is about the focus of time, energy, talents, and resources in relation to



your specified success. Eventually, right work is also about detailing those specific activities that are subsumed by each strategy that is chosen for display in the program logic model. Giving conscious attention to the criterion used in selecting strategies at this stage, and again later, will identify how implementation can make a big difference in the likelihood that your program will secure results. The right work is clarified and confirmed if there is a shared understanding of the problem you plan to resolve and there is agreement on how it can be accomplished. Specificity here, on the front end, contributes to the results you and your colleagues intend to secure. Ambiguity can doom the best-intentioned efforts to failure.

If your end result in a construction project is a great house, then cooking and sewing probably are not the most relevant strategies. However, planning with well-detailed blueprints as well as appropriate purchasing (e.g., quality lumber) and contracting should be ripe for your attention. It is surprisingly easy to spend time on the wrong work. It can be an unconscious or conscious choice. Theory of change models should display planned results and specify the most relevant and influential strategies to secure the results. The strategies are determined from a universe of possibilities. Often, people include strategies (and later, activities) they have always done or are most familiar with doing. If replication is intentional, then repeating what has been done before might be appropriate. As time passes and knowledge changes, however, results may require we use what has been learned about new or different strategies (and activities) to be more efficient and effective. Remember, a theory is only as good as its last test.

Tough Questions

Of course, there are many ways to secure a named and intended result. Discarding strategies/activities that are peripheral, modest contributors or less than optimal in potency can focus limited resources. Models and their iterations can develop a disciplined way of thinking that contributes to new understandings about what will generate progress toward results. Once results are specified, the discovery and discussion that should be encouraged during your modeling attends to these two big questions:

- What are the many ways we could resolve this challenge?
- Then, what are the most effective and efficient ways to secure results?

Subsequently, as model versions are explored, it is important to inquire further. For example, are we doing something that has a reasonable chance of working? Are we doing something that should be done? Are we clear enough about the work that we have shared expectations for what it includes and can yield? How does our model rely on research, practice, theory, and/or literature? We know that the politics of power and dynamics of resources often preclude these conversations. A predisposition to activities and busyness can overwhelm a disciplined and interactive process, too. However, the benefits and relative value of getting things right at the start are considerable. The opportunity cost or waste in missing this step is huge.

IN SUMMARY

Logic models display mental maps people hold about cause and effect. Combined, theory of change coupled with program logic models are the most potent design prescription. Theory of change models specify and link strategies with results. Most change efforts require multiple strategies. Knowledge is a critical input for models and can include research, practice, and theory. What people believe affects the content and format of models. Improving theory of change models requires multiple perspectives, unpacking assumptions, shared language, toggling, and the exploration of promising practices.

LEARNING RESOURCES

Reflection

1. What role do assumptions and beliefs play in a theory of change model?
2. How can you test a theory of change model for plausibility? Why bother with this step?
3. Are there blind spots in the modeling process? If so, what are they?
4. What are the implications of a change model that relies on a hypothesis versus one based on a claim with proof?
5. What are some ways that theory of change models can be improved and/or developed?
6. What challenges do complex and highly interactive systems present in a theory of change model? Where and how do you bound the presentation of a theory of change model?

Application

1. Have a conversation:
 - A. Ask colleagues to share their beliefs about parenting (or their mothers' or fathers' beliefs) to ensure a happy, confident, successful young adult. From this conversation, draw a theory of change. What are their most important strategies? Can you identify their beliefs, values, assumptions? Do they cite any evidence for their choices? Is research, practice, or theory part of their explanation? How are their views similar to or different from yours? Do they have a shared understanding and agreement about parenting with their spouse (or among their parents)? How does your response to these questions influence the model?
 - B. Ask a friend or colleague to share a recipe for marketing a new car model. What are the most important strategies for ensuring profit? What evidence supports

their choice of strategies? How do assumptions inform their theory of profitability? How does your response to these questions influence the model?

2. Ask several people to list the many ways that “improved health” might be described. Why does this outcome/result have different meanings? Could these differences influence modeling?
3. Find a news article that describes a change effort (in a government, nonprofit, or private sector). Draw it. Can you detect the efforts underlying theory of change? How was it informed: based on a claim or a hypothesis?
4. Considering the drawings from Questions 1 and 3, how do choices of strategies influence the likelihood of achieving your intended results? What changes, if any, could be made to improve the plausibility of these models?

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3

Creating Program Logic Models

This chapter identifies the basic elements of a program logic model. Generally, these models have enough detail to support design, planning, management, or evaluation. This chapter describes a program logic model example and the action steps to create a model with a small group.

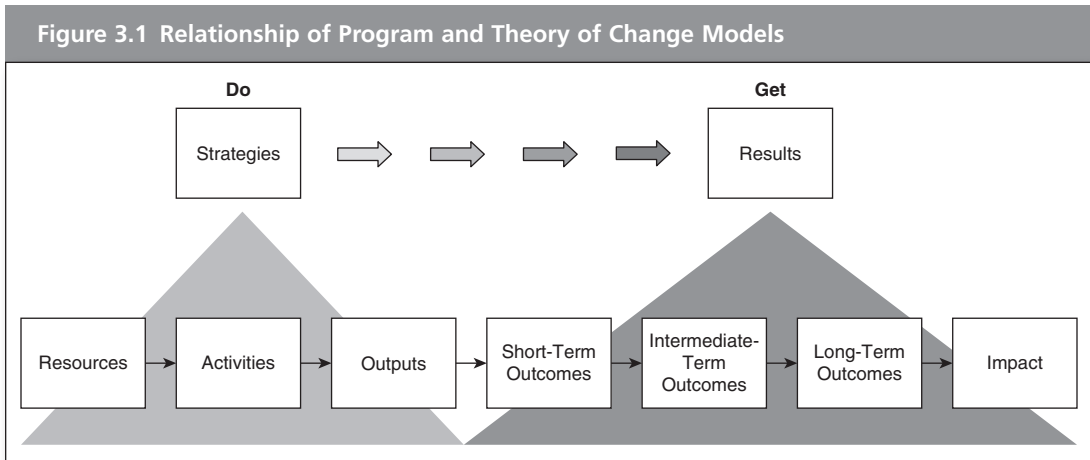
LEARNER OBJECTIVES

- Describe the relationship between theory of change and program logic models
- Identify basic elements for a program logic model
- Create a simple model
- Recognize limitations of display

From Theory of Change to Program Models

Theory of change logic models are literally the foundation for program logic models. When well developed, they can ensure intellectual rigor for program logic models. Figure 3.1 illustrates the relationship of a theory of change model (composed of strategies and results) to the primary elements of a program logic model.

Strategies reflect the resources, activities, and outputs needed to achieve results. Results reflect the sequence of outcomes over time through impact. Outcomes (for individuals) are generally progress in changes in awareness, knowledge, skill, or behavior among targeted audiences. There are also outcomes for organizations and systems. Although a plausible and evidence-based connection can be established, impact is often well beyond the scope (or feasibility) for the program being modeled. Together, outcomes, which are closer to the effort, of multiple strategies plus impact (further away) make up results. While program logic models are often built on a theory of change, it is also possible to infer a theory of change from a program logic model.



Assumptions Matter

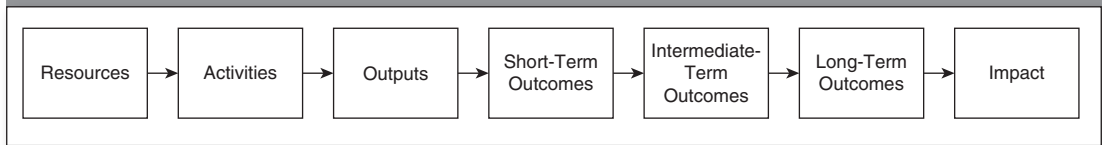
It is important to be aware that specific assumptions are not illustrated in Figure 3.1. Recall that assumptions are informed by beliefs and knowledge. Too often, program models are built without the benefit of explicitly naming the assumptions and underlying theory of change. This omission can help explain why tremendous conflict, even chaos, can erupt during program development, planning, implementation, or assessment. In the absence of explicitly named assumptions, either a clear theory of change does not exist or people hold multiple and conflicting variations that reflect their deeply held views about what should/could work and why. This can lead to diffuse or dilute programs that lack the focus and intensity needed to produce intended results. Because of these implications, omitting this “foundation” for your idea, program, or social change effort undermines its potential for success.

As noted previously, conceptualization and learning styles differ from person to person. Organizational culture can also affect how design, planning, monitoring, and measuring occur. Given these practical issues, we strongly suggest that both theory of change and program logic models eventually be created to form the foundation of shared meaning for all aspects of the program. The sequence in which they are developed certainly should and will reflect the stakeholders’ preferences.

Key Elements of Program Logic Models

Program logic models display what an existing idea, new program, or focused change effort might contain from start to finish. The elements in a program logic model consist of the recipe for a bounded investment of financial and social capital for a specified result. The level of detail increases so that the relationships shown by the model illustrate essential linkages needed to make a plan fully operational for each of the strategy strands identified in the theory of change. The primary elements for each strand of a program logic model include resources, activities, outputs, outcomes, and impact. Figure 3.2 is a template of the elements for most program logic models.

Figure 3.2 A Basic Program Logic Model



These program logic model elements are defined as follows:

Resources are essential for activities to occur. They can include human, financial, organizational, community, or systems resources in any combination. They are used to accomplish named activities. Sometimes resources are called inputs.

Activities are the specific actions that make up the program. They reflect tools, processes, events, technology, and other devices that are intentional in the program. Activities are synonymous with interventions deployed to secure the desired changes or results.

Outputs are what specific activities will produce or create. They can include descriptions of types, levels, and audiences or targets delivered by the program. Outputs are often quantified and qualified in some way. They simply characterize the application of activities with selected audiences.

Outcomes are about changes, often in program participants or organizations, as a result of the program. They often include specific changes in awareness, knowledge, skill, and behavior. Outcomes are dependent on preceding resources, activities, and outputs. Sometimes outcomes are parsed by time increments into short, intermediate, and long term. Time spans for outcomes are relative and should be specified for the idea or project described. However, short term is often 1 through 3 years, intermediate-term outcomes 4 through 6 years. Long-term outcomes might be achieved in 7 through 10 years. The intervals specified for any given model would depend on the size and scope of the effort.

For example, a small-scale project such as an adult education typing class in one location might produce knowledge and skill outcomes in 6 weeks, where behavioral changes such as use or changes in employment might take somewhat longer. Alternatively, a program targeting changes in global water quality might specify changes in the awareness and knowledge of international policymakers within 1 to 3 years; actual environmental improvements might not occur within decades. Typically, dividing the project duration into thirds works pretty well as a starting point. Relying on a literature or other evidence base can help inform what is feasible.

Being clear about timing and expected results is important. The time span for outcomes is project specific. Time is one of several important considerations. The logical sequencing of any given outcome chain matters, too. Think about what will happen first, then what is likely to happen next. Also keep in mind that the sequence may or may not be lockstep. Under some conditions, there may be different points of entry into a sequence. The important thing is to explore the interconnections and dependencies that do exist among the outcomes and impact you specify.

Impact is the ultimate intended change in an organization, community, or other system. It carries an implication about time. It varies in its relative timing to the actual program or change effort. Sometimes impact occurs at the end of the program, but more frequently, the impact sought is much more distant. For some efforts, this may mean impact can be cited in 7 through 10 years or more. This can have important implications, as it is well beyond the funding cycle for many typical grant-funded programs or the patience of many managers or politicians. The logic model is one way to show how the work you can do within these constraints may contribute to a larger, grander impact.

The “planned work” of a program logic model includes resources, activities, and outputs. These are the essential elements that are used to secure results or make change happen. The “intended results” include what the program produces: outcomes and impact.

Nonlinear Program Logic Models

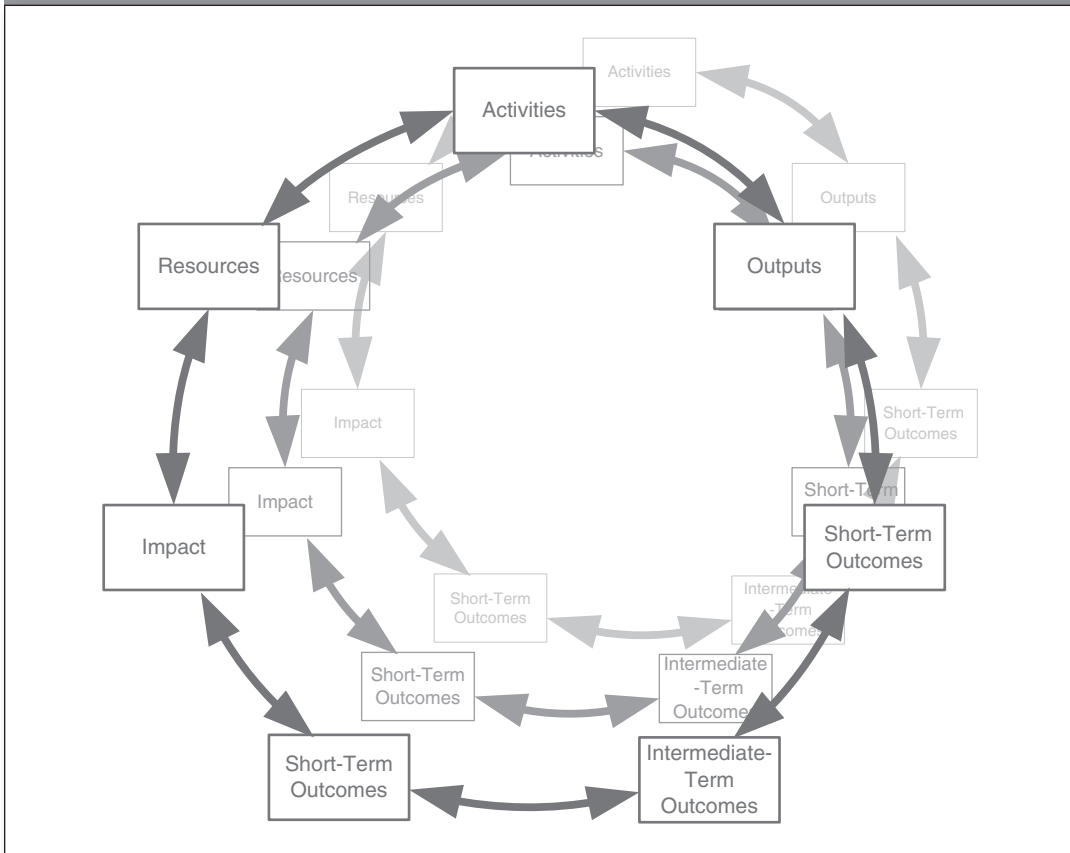
Just as in theory of change models, very few ideas, programs, or projects actually occur in a linear progression. Purposely, to aid learning, we simplified the display of elements as a straight sequence. Reality suggests cycles, iterations (additional attempts), and interactions are very common. This more organic development is shown in Figure 3.3.

In this circular display, there is no specific starting point. Although the logic model elements are constant, the work of design, planning, managing, or evaluating might begin with any element. In addition, this view shows how cycles of the same activity might occur over time. Keep in mind that the illustration groups activities together. A more detailed view could be staggering to portray. Sometimes, capturing reality in a display impedes communication.

Hidden Assumptions and Dose

A program logic model displays the elements that are most critical to establishing and operating a program or social change effort. It specifies the activities and their often interdependent relationship as well as what they are expected to generate. Program logic models do not necessarily include assumptions, but they rely on them. They offer a view of the map that can inform action planning and, later, implementation. Program logic models can also define the “dose” (e.g., number, type, and duration of activities), quantify and describe the effects and benefits of the program for a given dose and the ultimate change expected. Dose is an important concept in effectiveness. A dilute dose can have the same impact as none at all. For example, if your intended result is a large voter turnout in an election, a classified ad is not an adequate communication strategy. A comprehensive media plan coupled with free transportation to the voting booths has greater chances of success. So, it is important to design a program with enough of the right activities to secure the outcome you intend.

Figure 3.3 Nonlinear Logic Model



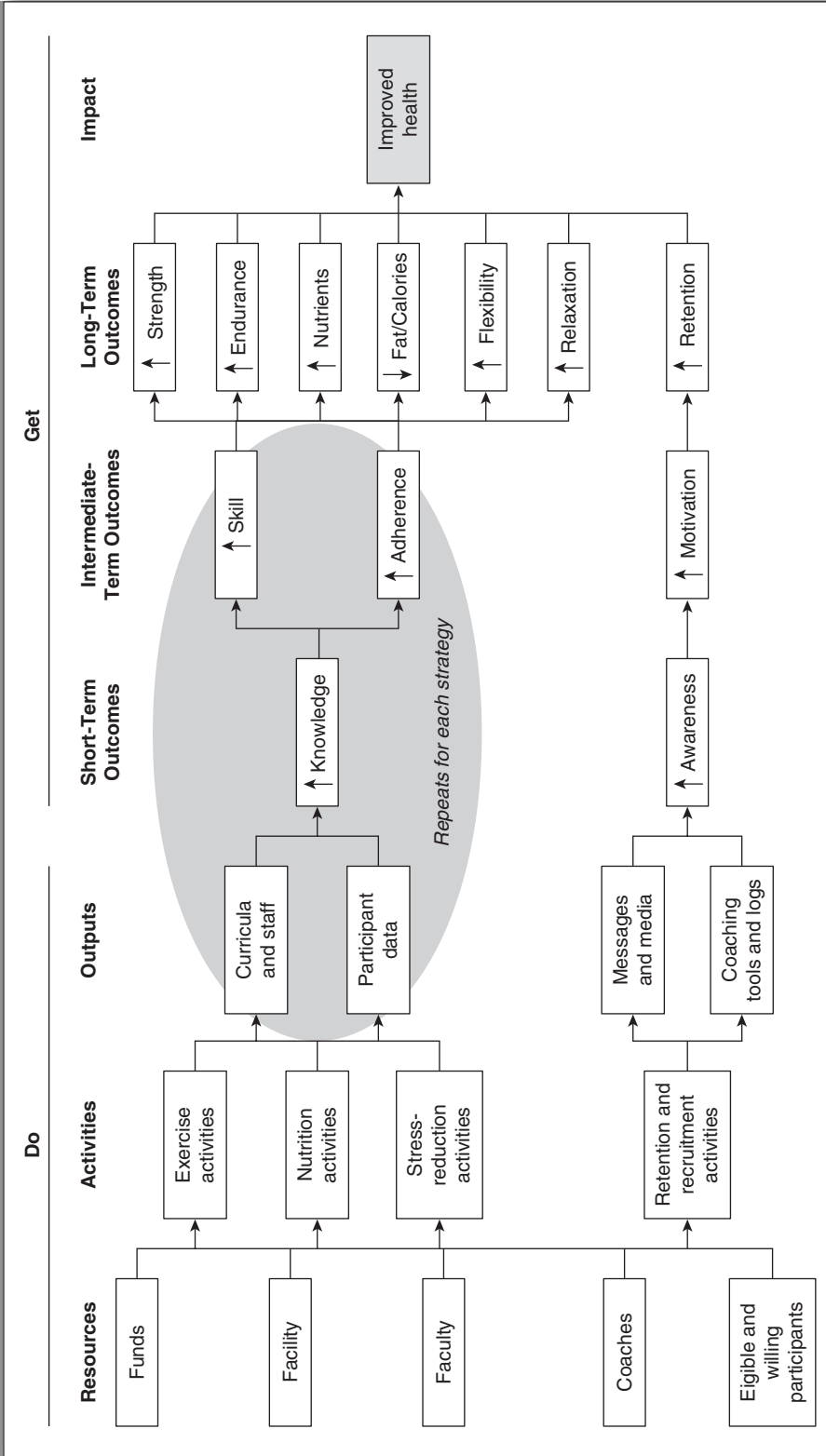
Building a Program Logic Model

Program Logic Model Example

An example of a simple program logic model for securing improved health is displayed in Figure 3.4. Read from left to right, this program model suggests that if we recruit and retain participants and provide exercise, nutrition, and stress reduction, then we will secure improved health. Note the development of detail connecting strategies to results in this model compared to the theory of change (see Figure 2.3). The program logic model provides detail for the theory of change by explicating the elements from a basic logic model for each strategy strand. In a program model, the details relative to resources, activities, and other elements are named.

Although still an overview and incomplete, this illustration provides a more detailed view of what this health improvement program wants to do, plans to measure, and hopes to achieve. Beginning on the left with resources, this model includes funds, facility, faculty, and coaches, as well as eligible and willing participants, among its requisite inputs. To keep it simple, the strategies contain implied clusters of

Figure 3.4 Improved-Health Program Logic Model



activities in this illustration. The specific activities that contribute to outputs are not named. Outputs from the intervention strategies and associated activities (exercise, nutrition, stress reduction) could be numerous. For this illustration, we show only the overarching categories of information that could be considered. Each category would be repeated for each of the strands. These would include details about the scope, sequence, and quality of the curriculum; staffing qualifications; and information about participants and their participation. Activities “inside” these strategy strands contribute to changes in knowledge, skill, and adherence. Eventually, they can contribute to increases in strength, endurance, nutrients, flexibility, and relaxation. Concurrently, over time, these same strategies also yield reduced fat/calories. The retention and recruitment strategy strand also generates some outputs and outcomes. Aggregated, activities within this strategy secure and keep participants in the program. Note that this model uses arrows to show relationships. Sometimes they reflect a cluster (indicating synergies) rather than just one:one relationships.

As is typical of many programs, several strategies may be shown as contributing collectively to outcomes rather than each strategy making its individual contribution to distinct outcomes in isolation. Collectively, the long-term outcomes generate improved health, which could be measured in a variety of ways (e.g., blood pressure, blood lipid and sugar profiles, weight).

In contrast to the big-picture view that theory of change models offer, program logic models provide a closer, more detailed picture of operations. This view of the program provides adequate detail to then create work plans. Program models can provide a reliable outline for work plans that are used to implement and manage a program or larger change effort. Just like theory of change models, program models are often logical—but here, feasibility, given limited time and resources, is the appropriate standard for assessing their value. A common question about program logic models focuses on their level of detail. Essentially, the level of detail in program logic models should be determined by their intended use and users. Although somewhat situational, program logic models build out strategies to activities. Sometimes they can even get to the fine detail of tasks, although more often that is described in an operations or action plan.

From Strategy to Activities

Some program logic models can be extremely complex, but the steps to create them are generally the same as for more simple efforts (see Figure 3.2). Large-scale programs or multiyear change efforts (sometimes called “initiatives”) often are composed of many strategies aimed at target audiences across many sites over considerable time.

Program logic models usually do not display underlying beliefs or assumptions. They are nevertheless important elements in the conscious exploration of multiple target audiences. Sometimes programs or change efforts are implemented in a cascade with some overlap in time, which requires a particular sequence of strategies and associated activities. When this is the circumstance, it can be helpful to focus on a function, a given strategy, or one partner’s designated work. The task is often simplified by thinking about a single aspect and then connecting it back to the

whole with some of the inherent complexity reduced. Ultimately, program execution relies on integrated action—but the work that precedes it may require focused developmental attention on smaller parts.

Using the health improvement program example, Figure 3.5 provides an orientation to how the exercise strategy strand might be reduced to activities. It breaks the strategy into greater detail for the purposes of selection and design.

In Figure 3.5, it becomes evident that exercise as a strategy is made up of several key activities. They include physical exercise (strength and endurance), education, and assessment. Together, all of these activities represent a comprehensive strategy, exercise, that is just one means to improved health. Recall that the whole theory of change for this example also includes stress reduction, nutrition, and retention. It is the combination of strategies reflected in the whole program that is most likely to secure results. Each strand of a comprehensive program logic model needs to illustrate the contribution of each strategy as well as the interdependence.

As you specify the activities content of your strategy, you are naming more precisely what makes up the given strategy. Later, the whole model is tested for feasibility—both practically before implementation and literally when the program is evaluated.

In Figure 3.6, we provide a view with greater detail for *only* the exercise strategy. In this illustration, we show the detail of activities within the exercise strategy. It also suggests the many decisions hidden in program design and planning. In choosing activities, it is critical that the relationship among strategies and activities is intentional. The strategies and the cluster of appropriate activities should also be chosen with reference to a target audience. Remember, logic models use if-then sequences from left to right in the columns and among the features as you read from left to right.

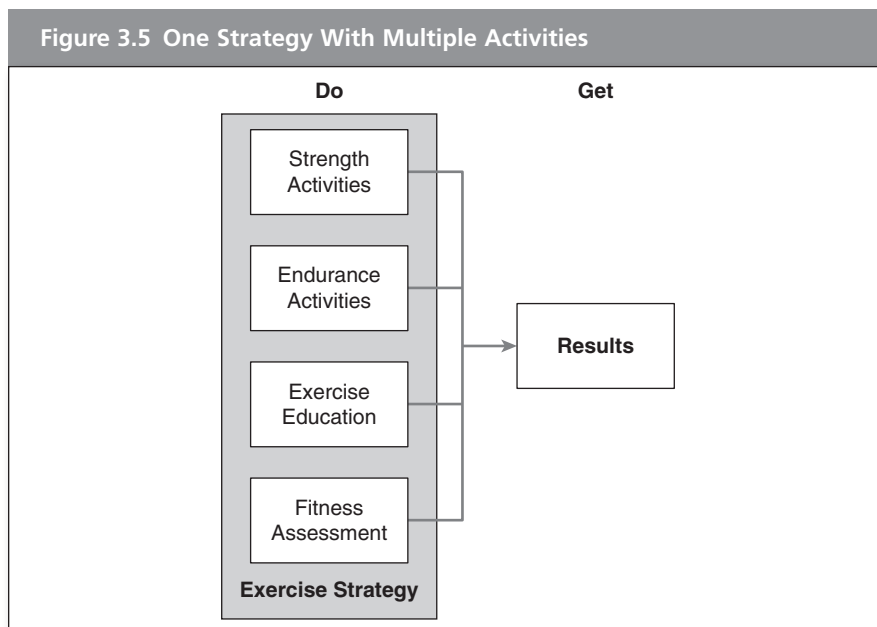
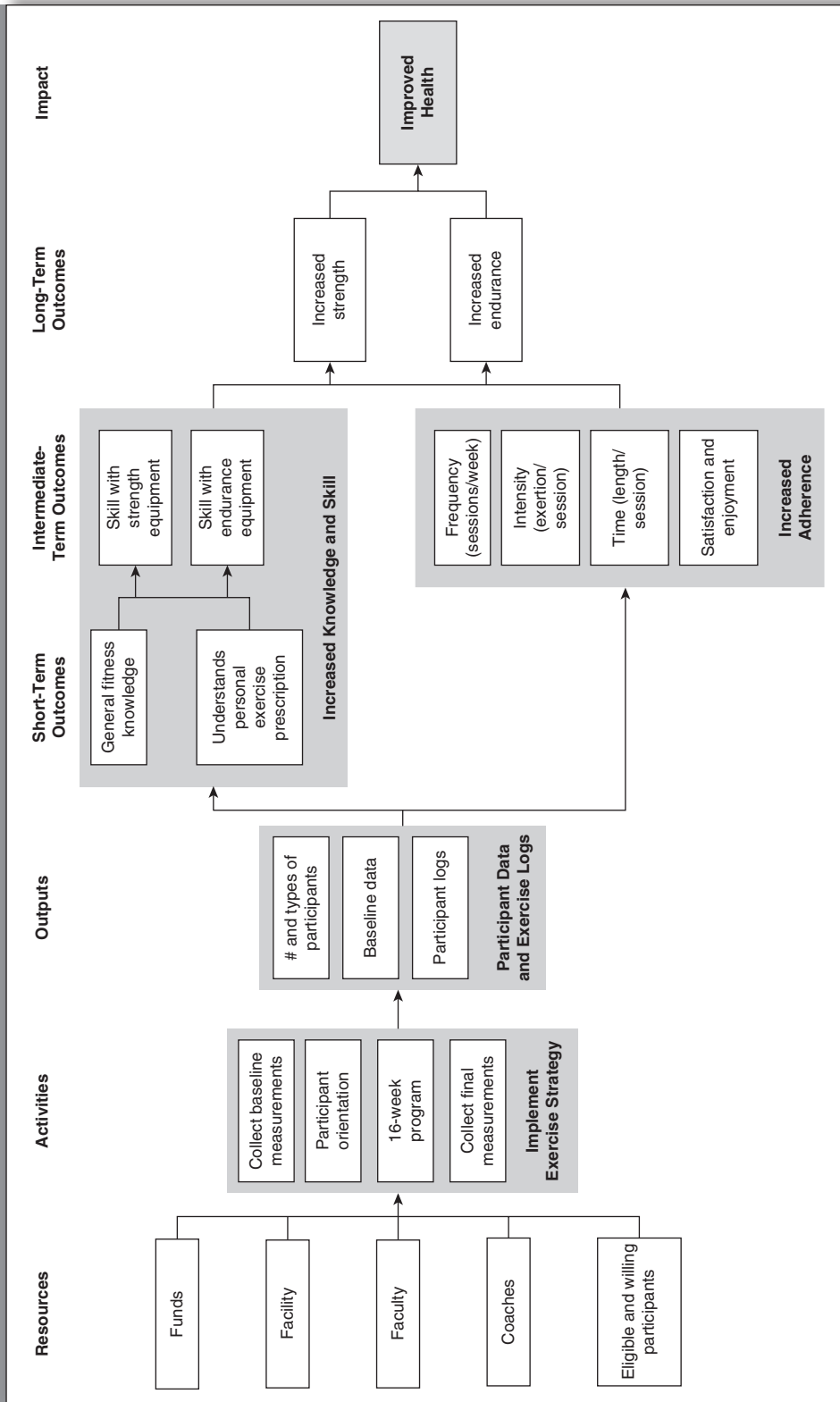


Figure 3.6 Exercise Strategy Detail



Action Steps for a Program Logic Model

The practical construction of a program logic model often begins with one or more information sources (e.g., research, interviews, documents). We recommend that people begin both theory of change and program logic models with the named ends. People are most clear about their intended results (outcomes and impact). Our experience is that you do *know* what you want to accomplish. The results sought reflect both the impact intended and the outcomes over time. Next, name the changes or outcomes that will be part of your progress toward impact. Unpacking this sequence is important because it makes it easier to see the strength of the connection between what you do and what you can get. We suggest tackling the activities required to achieve the outcomes you have specified in your third step. Activities are about *how* intended changes will occur. Fourth, resources/inputs become the essential ingredients of activities. And finally, outputs reflect the information needed to verify that activities named earlier in the process reach the right audiences and are of the quality and quantity needed to produce results. So, the steps to draft a program logic model are ordered in this way:

1. Identify the results that one or more strategies will ultimately generate.
2. Describe the stepwise series of outcomes (or changes) that will show progress toward impact.
3. Name all the activities needed to generate the outcomes (for each strategy).
4. Define the resources/inputs that link directly to and will “supply” the activities.
5. Identify the outputs that reflect the accomplishment of activities.

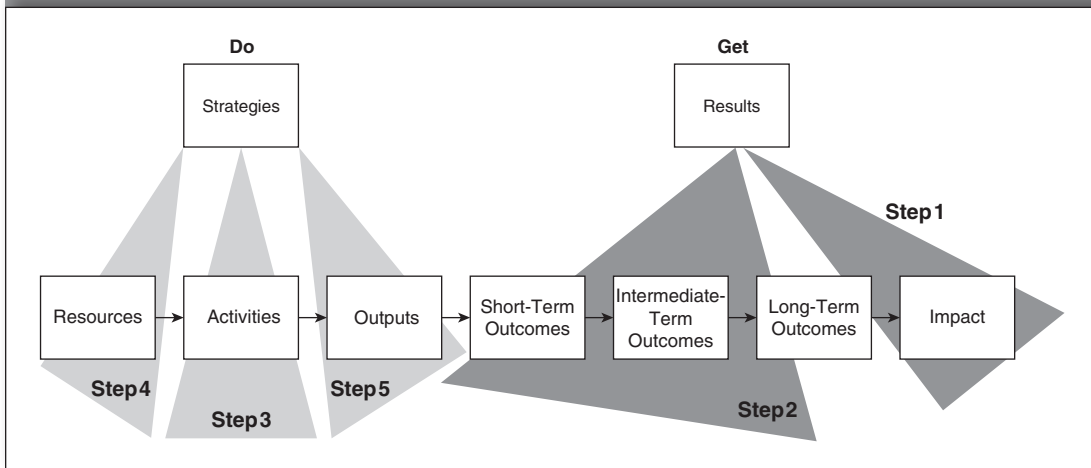
Figure 3.7 illustrates these action steps and their sequence.

Creating Your Program Logic Model

The format of a logic model helps organize information in a useful way. Think of an idea, project, or program you manage now or want to create and its results. For each strategy, brainstorm elements that might be cited in short-term outcomes first but are clearly linked to your intended results. Do the same for resources, activities, and outputs. It is important to make choices about the outcomes that are feasible with your limited resources. This is discussed in greater detail in the next chapter.

With some experience, you will begin to recognize commonly used strategies that reflect knowledge from your field or discipline. For example, marketing/communications, recruitment, retention, professional development or education, advocacy, and policy are strategies often found in program models. Examples of activities under a marketing/communications strategy could include preparing a database of target markets, generating news releases, creating and sending a newsletter, establishing a website, and distributing public service announcements. We suggest you tackle one strategy at a time. Aim to define the same level of detail for each strategy. Selected examples of archetypes, or tested recipes, are described in Chapter 7.

Figure 3.7 Steps in Creating a Program Logic Model



Guiding Group Process

We think the best method for generating a program logic model engages a small group, especially if the members are stakeholders in the idea or program it represents. Stakeholders are situational, but they generally are those who have an interest in or are likely to benefit from the program. Logic modeling often includes funders, program staff, and program participants. Intentionally including stakeholders supports best contributions as well as some subsequent benefits relative to implementation. The facilitation of modeling requires some advance planning and a commitment to both discipline and quality during the process.

If you've already constructed a theory of change, use it to catalyze the creation of the program logic model. If not, defining shared understanding for specified results gets your group process effort started. It is important to note that models may need to be updated to respond to the dynamics of an external environment (context). They also reflect living systems that are not mechanistic but changing. For these two reasons (and others), it is necessary to expect models will be revised. In association with some public specification of time, impact and outcomes can be explored and selected. This can be accomplished a number of ways.

We have had success in using the action steps noted, particularly when each participant contributed to brainstorming the model elements by nominating contributions on sticky notes. This quickly generates a large number of possibilities for each element. Redundancies should be noted and celebrated as commonly held. Then, the group can sort them: those that *must* be kept, that *could* be kept, and those that are *not relevant*. Once the results are named, then it is possible to compose content for the other elements. In this disciplined sequence, each stakeholder contributes to the whole, and each contribution has the benefit of an internal test relative to design.

There are several variations on this approach. From a group, you could invite individuals or pairs to generate models in the sequence shown previously and then

reconcile the variations. This approach helps avoid “groupthink” but requires strong process facilitation with content knowledge. A generic model or template for a given program may be available. With some advance planning, it’s possible to identify one of these archetypes and introduce it to your group. Then, the content adaptations can focus on improving it so that the content is relevant to your purposes, conditions, and planned results. Chapter 7 includes examples of models that can be used in this way. Sometimes a call for proposals or funding opportunity will articulate the range of acceptable content in a model.

Regardless of the process, strategic decisions about activities and the relationships between elements should be made from among all the content generated. It is important to consider criteria for choices that reflect context, target audience(s), research, practice, literature, and program benchmarking, as well as resource parameters. It can be very helpful to have draft models critically reviewed in a “mark up.” This is described in the next chapter as a quality assurance process.

We often use Microsoft Visio to construct our models, but many other applications such as Word and PowerPoint have drawing options. These as well as Inspiration software are all readily available. The Supplemental Readings list at the end of the chapter identifies some examples of other free and commercial software applications. Take care in using technology for model creation, because it can exclude valuable participation.

IN SUMMARY

High-quality program logic models depend on the evidence base found in their parallel but simpler theory of change models. Program logic models display several important elements: resources; activities; outputs; short-, intermediate-, and long-term outcomes; and impact. To create a program logic model, start with the intended results: outcomes and impact. Then, activities (which are consistent with strategies in the theory of change model) are selected. Next, resources and outputs are cited. We believe creating models with deep participation of stakeholders improves their quality and encourages their use.

LEARNING RESOURCES

Reflection

1. What are the implications of a program logic model built without a specific theory of change?
2. Think of a successful business and its product or service. What is the underlying program logic that shows the explanations for profitability?
3. Feasibility relies on several aspects. Can you name some?

4. What are strengths and limitations of a linear or a nonlinear display? Would individuals from different fields (and their relevant cultures) answer similarly or differently? Why?
5. Why is being specific about results important?

Application

Specify the result of a shared program, project, or idea. Draw a theory of change model for the program, project, or idea. Then, attempt a program logic model. Using sticky notes or pieces of paper, brainstorm the outcomes that need to happen to secure the result. Organize them into short, intermediate, and long term. Pick one short-term outcome. Brainstorm what activities are critical to that outcome. Organize the activities relative to a single or multiple strategies. For given strategies and their activities, name the resources needed. From the activities, cite what outputs are possible. Organize these elements as one model.

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Internet Resources

For comprehensive bibliographies and links to additional resources, see

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4

Modeling

Improving Program Logic Models

This chapter focuses on improving models through simple processes that test feasibility. With careful and deliberate review, models for an idea, program, or project can change and mature in their quality. Logic models that are accurate and realistic representations of what you do and will get can increase the likelihood of effectiveness.

LEARNER OBJECTIVES

- Apply simple review and improvement steps to models
- Identify common errors in program logic models
- Recognize the value of multiple versions of models
- Recognize contributors to model quality

The process of modeling supports *better thinking* about a given idea or effort. It can establish routines wherein alternative possibilities are considered and explored. Modeling may be an important antidote to snap judgments. We see modeling as an essential step that has tremendous potential to position a project, program, or initiative for greater effectiveness. It generally involves several versions or attempts at models that result from a critical review of the information displayed.

Modeling and Effectiveness

Once a shared model is created, then those who created the model and others who are external to the program should spend time on its critique and revision. Great plans and programs come from great models. Great models require several rounds of

revision. Modeling is the most important content in this book because critical thinking is what refines the content of the model. Modeling is a means to illustrate where you are headed, make better decisions about getting there, and get closer to the right work. We think it is important to test both plausibility and feasibility through modeling. In Chapter 2, we stated that plausibility is the most important criterion for a theory of change model. The process of toggling between combinations of strategies and results to secure an evidence-based model tests and verifies plausibility. We provide techniques that address the aspect of feasibility once plausibility has been established or confirmed. These criteria reflect the widely used *Program Evaluation Standards* (The Joint Committee on Standards for Educational Evaluation, 1994) that include utility, feasibility, propriety, and accuracy. Given the strong relationship between programming (strategy) and evaluation (results), we draw upon what constitutes sound evaluation practice to inform logic model development.

This chapter identifies some of the common context challenges that influence models and mitigate their potential. Some result in flaws embedded in the models and others occur in the modeling process. Our list includes blind spots, myths, “logic,” and scale. We also name an overarching concern: culture. It can influence all the preceding items and more. Next, we identify some quality review techniques for program logic models. Through this sequence, we name the problems often associated with models and attempt to offer some remedies.

Context Challenges

Common Pitfalls: Blind Spots and Myths

Generating high-quality models through modeling is not easy, but both the products and the process do offer significant benefits. Some discomfort among participants during modeling can be an indicator that the process is useful. This discomfort probably reflects the twists, turns, flips, and angles of new or different thinking. It is important to be aware of blind spots (which we all have). Individuals have blind spots and small groups can have collective ones they protect and promote through interaction among participants. Blind spots are simply unintentional omissions in our thinking or commissions of error that happen because of habit (e.g., snap judgments, confidence, experience enables them). Eventually, these blind spots show up in our models because models represent how we think.

Prevailing myths are another pitfall to guard against. Common examples of myths include “access equals use,” “knowledge equals action,” “activities equals outcomes,” and “send equals communication.” These “myths” end up as embedded flaws in models because they are not precisely named and subsequently discarded. Almost every organization, department, or unit perpetuates some myths. We think it’s how people defend and rationalize bad habits. These habits are often a way of coping with the organization, a boss, a funder, or another entity. Avoiding the pitfalls of blind spots and myths through disciplined and intentional discovery can contribute to model quality and eventually to program effectiveness.

Logic, Scale, and Specificity

Logic models often display a logical sequence or chain of events, but this is not the same as feasibility. The content and order of activities as well as other elements in a model can make sense, but scale is often an obstacle. Scale is about the relative size of a given effort. In particular, we mean the relationship between the results sought and the quality, volume, frequency, and other characteristics of the intervention or “doing” that is described.

For example, a logic model could name “a just, sustainable community” as its impact. Strategies to secure that intention might include some nonprofit capacity development and leadership development. It is logical to think these strategies might eventually contribute to a just, sustainable community. But these strategies alone are insufficient to achieve the desired impact. There are other essential strategies necessary for this recipe to yield “justice and sustainability.” This theory of change model is not plausible.

Subsequently, as activities are selected (in association with the capacity and leadership development strategies), they are far too dilute to have influence. A program, if deployed as described, would be unable to make progress against such an ambitious impact. This is particularly true given the 3 to 5 years allotted to most grant-funded programs to secure results (outcomes and impact). Engaging a few leaders and nonprofit organizations is inadequate to the huge ambition of a just, sustainable community given the enormous number of variables that can intervene. The program logic is not feasible.

If the scale of effort does not match short-term outcomes, then its relative paucity can overwhelm chances of success. Given limitations, it is best to revise the model and indicate something that is appropriate. The first error in plausibility is compounded by a second error of feasibility. This example illustrates why logic, alone, is not an adequate quality test for models. It is important to note that sometimes theory of change models are plausible although the program logic model is not feasible. We believe success is more likely when plausibility and feasibility are evident in both models.

Given limited human and financial resources along with a time frame, it’s important to specify your program or change initiative carefully. Making these choices is difficult but very important. We applaud audacious and substantial change agendas. However, success is more likely secured if your work is discrete and seeks near-term outcomes that, if accomplished, will contribute to results. For example, consider ending childhood obesity. This is an important and big result that reflects a complex systems challenge. Rather than taking on all of this substantial responsibility, perhaps the program effort that reflects your niche is focused on a single aspect such as more physically active middle school children. A reduction in childhood obesity will be more likely if you describe a selected population of children, their gender, their school district, and details of the activities that will constitute your project. These choices focus your results and intended outcomes. They also help inform the best prescription to deliver the dose needed to secure success. We know from experience that specificity is linked to success. Specificity does not preclude scale or ambition; it can complement those issues. We suggest that efforts with limited resources and/or relatively short time horizons be focused on outcomes that are earlier in the

sequence on the path to the vision of the future you want to create. These more proximal outcomes can help define a contribution to the desired results. The strength of logic models lies in articulating the contribution to desired impact.

Probability statistics underscore our point: With fewer variables, the likelihood of the optimal combination increases. As the variables increase in number, the likelihood of success declines. We advocate for “smaller bites.” It simply means picking which results are likely and moving backward from those results while employing a feasibility lens to determine the activities needed to develop plans, programs, or related efforts.

Politics, Persuasion, and Perception

Sometimes errors in scale are authentic oversights. Other times, the politics of context are the origin. It is quite common for agendas that include marketing or positioning to supersede what’s feasible. Models can be very persuasive. Something that is simple and clearly described in a graphic format is compelling. Models often help to persuade others because they clarify meaning and provide a logical organizer consistent with how people think, from actions to consequence. Depending on intended use, beware of models that are vague, general, and lacking in focus. Grandiose hyperbole in a model can indicate it is a marketing tool. Because logic models are socially constructed, it is important to beware that they may represent a shared view—but not necessarily factual truth or reality. The model can display “the” truth or perception of those who created it—or a combination of both. It is an error to assume every model is an evidenced-based prescription. The rigor of models in this matter varies considerably and reflects the context of their purpose and construction.

We indicated early in the book that models are co-created to ensure shared meaning. Exchange with and among participants during the model creation and modeling helps to generate common language. This process also ensures a display that is both intentional and commonly understood. A model that conveys consistent messages among those who created it may not have the same meaning to others because they missed the dialogue, exchange, and iterative processes. An important challenge in this group work is avoiding simple compromise. Compromise may satisfy the intragroup dynamics and politics, but it is not the same as strategy. Models need to reflect strategic thinking and choices. Keeping the focus on strategic choices to secure the intended end results is crucial to model quality and ultimately to program effectiveness.

Besides feasibility, we think program logic models should aim at utility. For this reason alone, models will look different depending on the co-creators and the intended model use. This situational aspect applies to the level of detail in a given model, too. Program logic models can be complete but vary considerably in their content. What one group determines as a useful level of detail may be inadequate for another. Others may choose to model certain aspects of their program with different level of detail. Chapters 6 and 7 display some of this variance in format and use in case profiles and examples. The social construction of models means they will inevitably reflect assumptions, expectations, use, and other context features.

A Learning Culture and External Review

How models are created influences their format and content. We've already mentioned the composition of the review group. In addition, the culture (norms, values, beliefs) of those gathered to create and/or improve the model is very important. The best culture for improving models is one focused on learning from experience. This implies lots of variation and versions of models that will help secure the one (eventually) used for plans and execution. Mistakes are critical to learning, and it's important that "mistakes" are welcomed. People often need the subjective processes of critical review to identify errors and eventually secure remedies. Nobody draws a "perfect" model on his or her initial attempt. We believe a perfect model is not attainable regardless of the number of attempts. Any model simply represents a snapshot of the best thinking at a given point in time.

Processes to test logic models can retain and engage the original stakeholders who first drafted it. However, models improve most dramatically when introduced to colleagues or external sources that are not directly invested in the models' elements or their implementation. In this way, "disinvested" parties can offer objective critiques, which often uncover blind spots and identify weaknesses, flaws, leaps of faith, ambiguities, "cockamamie," and fiction.

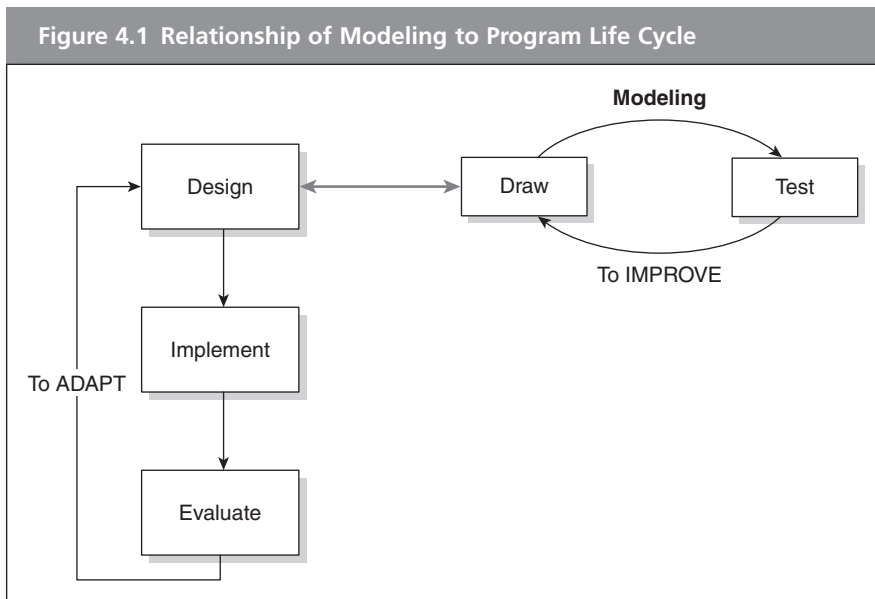
When inviting an external review, it's important to be aware that people may see and read models differently than those who created them. An external review can help provide great insight to both improved model content (e.g., resources, activities, outputs) and relative display (by virtue of placement and arrows that indicate relationship among content). Moving from general to specific, ask those doing an external review a series of questions. For example, initial questions might discover more about how the parts fit or do not fit together, what are other ways the same results could be achieved, and if the resources are adequate. The review might also inquire about the assumptions embedded in the model and ask about the underlying theory of change it has been built on.

Quality Techniques

Modeling

Most ideas, projects, or programs can be characterized in their "life" to include four simple stages: design, implementation, evaluation and adaptation. We suggest that modeling is most useful when done in the creation stage and during evaluation, but models can be used at any stage for different purposes. Getting things right at the start can be very important to ultimate results and is a key influence to subsequent stages. Modeling can be thought of as a review process that occurs prior to implementation or execution. It is done to improve thinking and the models that reflect thinking. Time and effort spent in this work can have enormous return on investment through the influence on the program itself. The steps in modeling are draw and test. This construct is displayed in Figure 4.1.

As a program, project, or idea is created, we suggest it gets drawn as a model. The "draw" step is satisfied when all elements of a program model (see Chapter 3) are present.



Completion of this step means resources, activities, outputs, outcomes, and impact are named. This provides an opportunity to graphically display the thinking behind how the ideas framed in the theory of change will be implemented as a program. Many efforts with logic models quit at this point. However, through modeling, you can move quickly to dialogue to process the content and the “tangles.” Tangles represent areas of confusion or where some in your group think a choice is wrong, confusing, or poorly specified. Modeling is the process that guides model improvement.

In this chapter, we begin to name how and what can test (or explore) model quality. We believe this testing can help improve models. The subsequent versions of models that result from literal and figurative tests are products of modeling. This process can yield benefits to the specific idea or project as well as the individuals engaged as a work group. It is important to be aware that many external issues influence modeling. We describe some of those issues, but our list is not exhaustive.

Testing Model Quality: SMART and FIT

In a conscious testing effort, one way to explore the quality of a model is to apply SMART principles to it. SMART is a mnemonic used since the early 1980s to set objectives:

Specific: what to do is clear enough to act on and is connected to outcomes.

Measurable: the content can be both quantified and qualified.

Action oriented: the content is selected to provoke change in awareness, knowledge, skill, and/or behavior.

Realistic: the content is both plausible and feasible.

Timed: the content specifies a duration and illustrates the time-dependent sequence of outcomes for progress toward results.

If just a few people apply SMART principles to the outcomes portion of a program logic model, it will probably surface several flaws and, at the very least, some good questions. It may also raise concerns that are unique reflections of the training, experience, perspectives, and style among those contributing to the review. We suggest that a SMART analysis be applied to both the parts and the whole. In other words, it can be used to examine selected individual strategy strands and activities, as well as the model as a comprehensive effort.

A second way to explore or test the quality of a model is to consider FIT. FIT is an acronym that was first coined by the American College of Sports Medicine as FITT (frequency, intensity, time, and type). Although originally developed to prescribe exercise, we have modified it for use in our practice to quantify program delivery. It stands for

Frequency of occurrence,

Intensity or strength of the given effort,

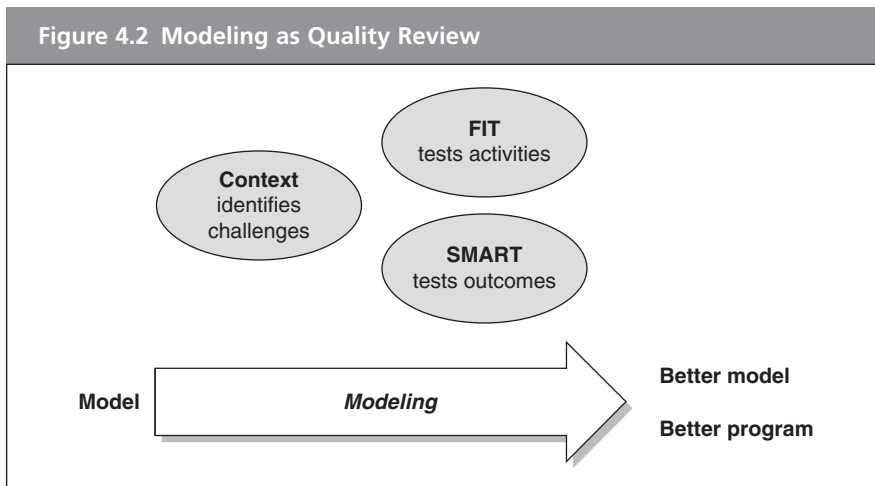
Targeted at a specified market or audience.

FIT principles offer an easy way to consider the process elements of the program, project, or idea you display in your model. They translate to important questions about the adequacy of dose relative to intended results. The frequency reference implies this question: Does the project (idea or program) repeat, occur with appropriate volume, or happen often enough so that results are likely? The intensity reference implies this question: Does the project (idea or program) have enough depth or concentration that results are likely? The target reference implies this question: Does the project (idea or program) aim at an appropriate and specific audience or market segment?

In effect, FIT can remedy “treatment trickle,” one thing known about resolution of problems or generating a change in awareness, knowledge, skill, or behavior: The treatment (or intervention) needs to be both appropriate (the right choice) and adequate (the right dose). The wrong choice won’t help get the results you want. The right choice has more chance of securing results, but there needs to be enough of it (volume) focused on appropriate targets to ensure results. “Treatment trickle” means that a problem or challenge is underdosed or an effort that is too broad or diluted to have impact. Feasibility is enhanced when we tackle a desired change with the right strategies as well as appropriate depth of intervention. Treatment trickle is common because people prefer to give everything or everyone “some” rather than make hard choices about who or what gets enough! It is often a reflection of limited resources, vague goals, or organizations with an activities focus (see Figure 4.2).

A “Mark Up”

In Figure 4.3, we revisit the logic model introduced in Chapter 1 for the Community Leadership Academy program. We suggest a technique that’s often used in the



legislative process as working drafts of language for a regulation or authorization are generated. It is called a “mark up.” We adapt the legislative mark up to raise important questions about model quality by applying SMART and FIT principles. Other elements, including context and technique questions, can also be used. This discovery is aimed at changing the model in constructive ways that reflect evidence, strategic choices, and better thinking. Using a disciplined approach to modeling captures an important opportunity for models to mature in quality.

Frequently, those who participate in developing a model judge how well it addresses the SMART and FIT criteria differently from how it is assessed by an external audience. This is because external reviewers may lack the context and shared meaning that emerge during development. Not all the meaning in a model is explicitly captured, displayed, or explained. The degree to which a model is SMART or FIT is highly contextual and situational. Ratings will depend on who the model is developed for, the model’s purpose, and the level of detail the model is intended to communicate. If it is important that your model be self-explanatory under all conditions and/or viewed as credible to a wide variety of external audiences, then consider supplemental narrative. Remember, the model is a summary; it is usually not intended to tell the whole story.

In the Figure 4.3, questions generated from the application of SMART, FIT, and other process principles are placed on the model for discussion and resolution. The provoking dialogue that will likely occur will in turn result in changes to the model content based on new understandings, evidence, and other contributions. Your review of this model may raise different questions about its feasibility.

Figure 4.4 uses the same mark up process to identify questions and concerns about content in the health model. As a constructive effort to critique and refine, quality testing is an important but often overlooked step.

In both of these mark ups, FIT questions aim primarily at the quality of process or intervention dose. SMART questions are focused on the feasibility of outcomes. It is easy to see that as the model increases in complexity, the challenges to success increase, too. In a comprehensive effort, more pieces or parts must align and work together to

Figure 4.3 Community Leadership Academy Program Logic Model Mark Up

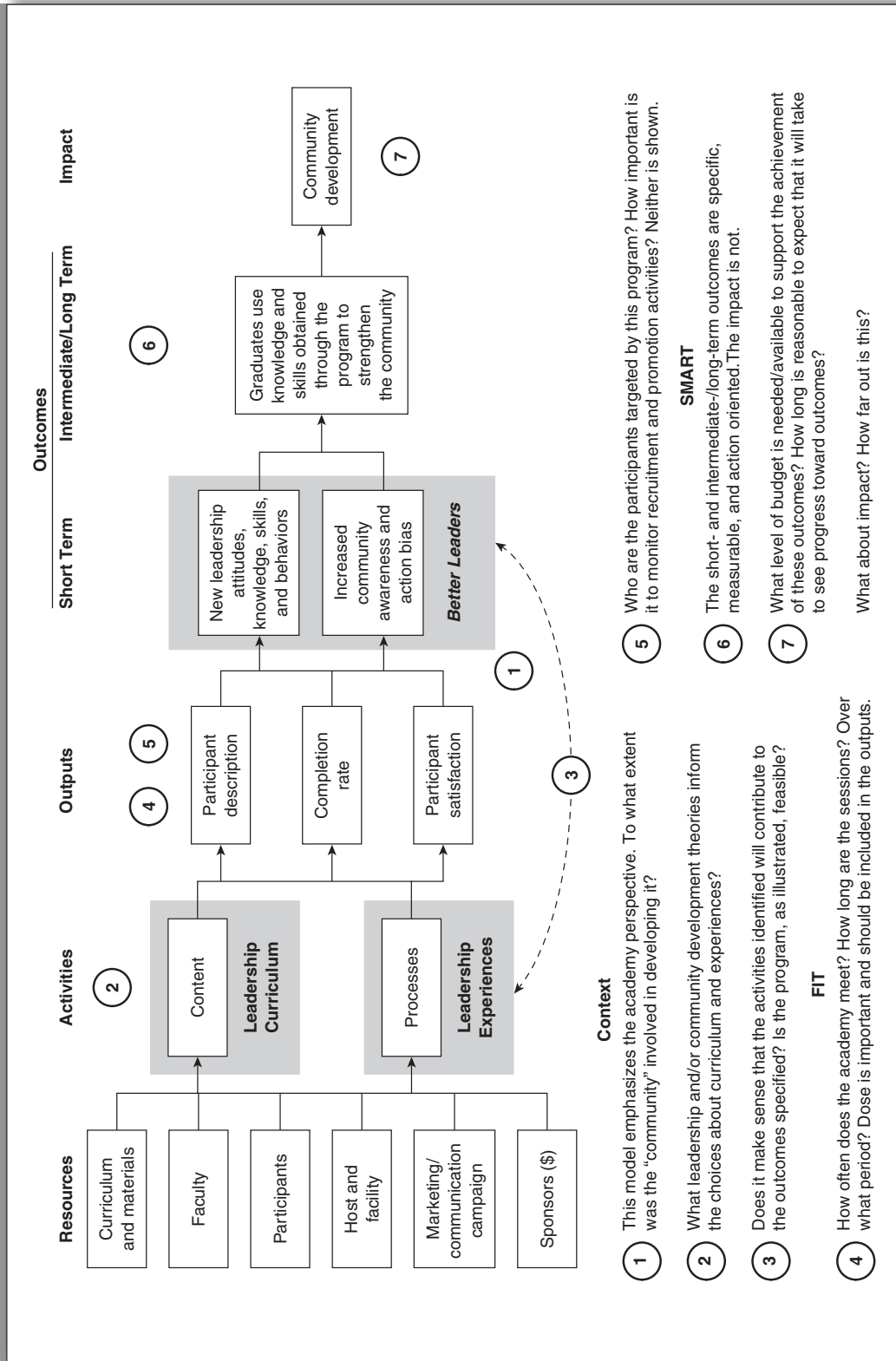
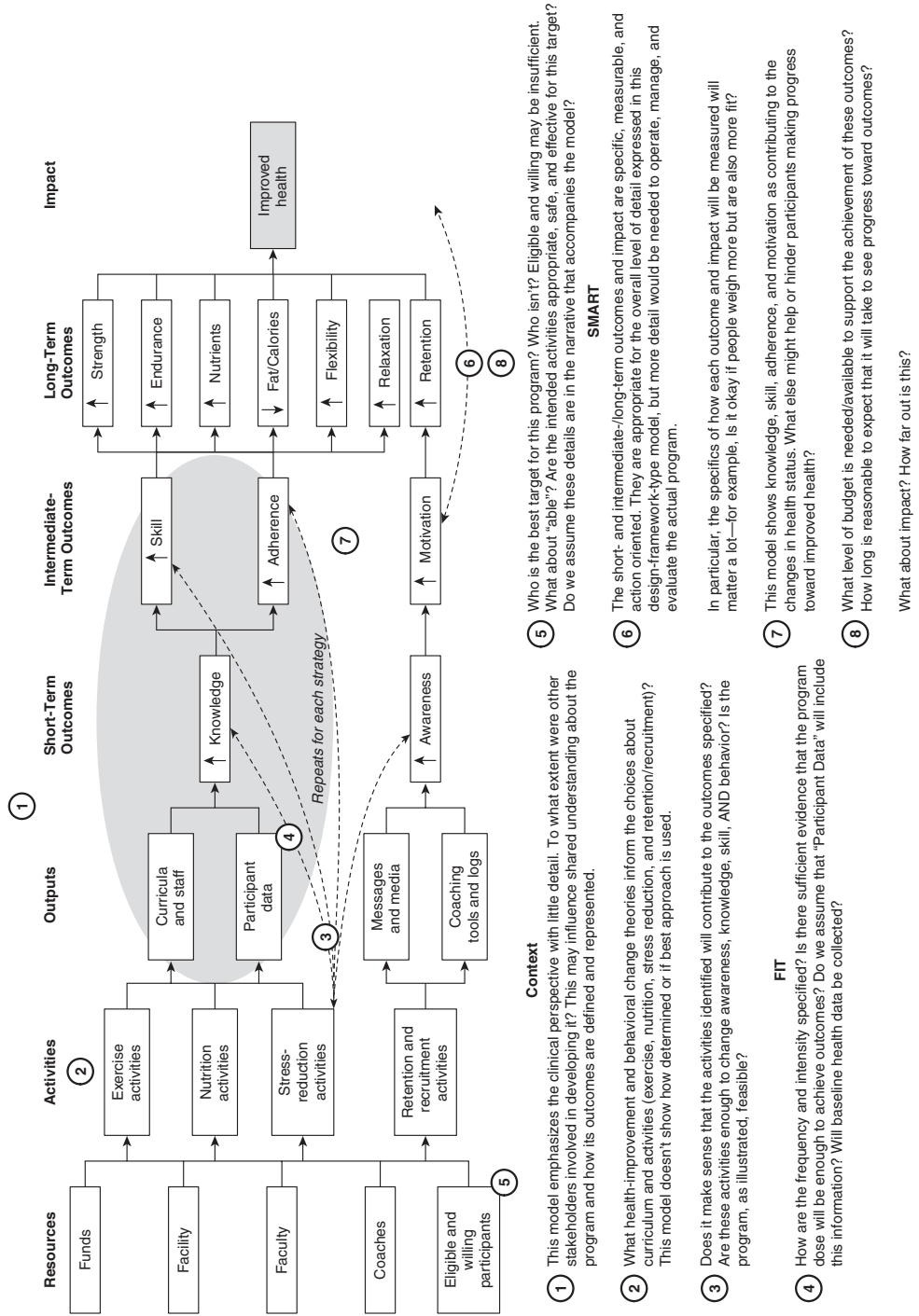


Figure 4.4 Health-Improvement Program Logic Model Mark Up



secure the intended impact. The real time and context between activities and outcomes means many external issues also have the potential to influence the outcomes.

Typically, groups vary on how much emphasis they place on each of the characteristics of quality models described here. As with model interpretation and review, context and composition of the group frequently determine how the difficult distinction is made.

This also points to crucial issues in execution. When a model (representing an idea, project, or program) is evidence based, strategic, and well designed, implementation can still fail its potential. Although logic models are often used to inform evaluation, modeling at this stage is rarely done (see Chapter 5). Although outside the scope of this text, great execution is absolutely essential to results.

Quality Questions

The models you (and your colleagues) build reflect your collective thinking. Nobody would argue with this assumption: Best thinking is a critical input to any work and its likely success. As you consider the design or plans for your project (program or idea), the following questions reflect quality considerations. They include application of the SMART and FIT principles. You might construct other questions based on your own experience or particular subject matter expertise. Think about ways to conduct discovery around blind spots, myths, and other culture concerns. Regardless, it is important that deliberate efforts are invested in the maturation of a model. Modeling provides an opportunity to test, improve, and revise models. This process helps develop the thinking and the program that the model represents.

Quality Questions for Program Logic Models

1. Are the results specified with shared meaning among all stakeholders?
2. What research, practice, and theory are grounding for our choices in activities? Is there a relationship between the program logic model and a theory of change?
3. Did we challenge the recipe of activities and outcomes to ensure feasibility given the challenges we seek to resolve?
4. What activities have worked under similar conditions? What current conditions might influence selection of activities? Is there evidence that these activities are best?
5. Is the model FIT?
6. Are target audiences clearly defined?
7. Does the interaction among activities contribute to intended outcomes?
8. Do the outcomes feasibly contribute to intended results?
9. Is the model SMART?
10. Do we have adequate resources and time to accomplish intended results?

A Quality Model

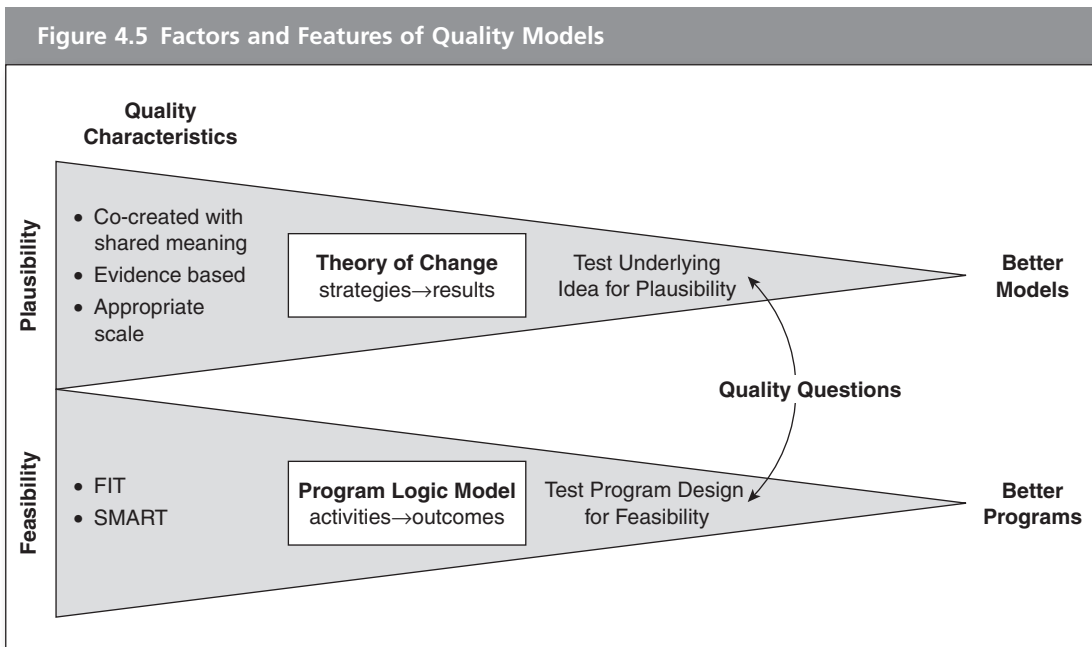
Figure 4.5 displays characteristics for model quality. It assembles key narrative from this chapter into a graphic. The figure describes two important standards for model quality: plausibility and feasibility. The quality characteristics for theory of change models are noted (as in Chapter 2), where the focus is on the relationship between strategies and results. The quality characteristics for a program logic model are captured by FIT and SMART principles. We suggest the application of this in a mark up is one way to work with colleagues in modeling. We think, taken together, theory of change models that are plausible and program logic models that are feasible can contribute to effectiveness.

“Better” Decisions

Earlier in the text, we asked three questions about effectiveness:

- Are you doing the right work?
- Can you make better decisions?
- Are you getting superior results?

The second, about making “better decisions,” is highly central to modeling. In effect, we apply this query to strategy and activity selection relative to results. How you choose to focus time, energy, talents, and resources in relation to your specified success is related directly to effectiveness. There are many ways to secure a named intention. Discarding strategies/activities that are peripheral, modest contributors,



or less than optimal focuses limited resources. Further, specificity about strategies and activities contributes to the results you and your colleagues intend to secure. Ambiguity should be avoided. Eventually, “right work” is also about the strategies and activities in the program logic model. Giving conscious attention to the criteria employed in selecting strategies for the theory of change model and then the specific activities in the program logic model can make a big difference in securing results. “Right work” gets clarified and better decisions considered through the process of modeling. Models and their versions can develop discipline as well as standard practices that contribute to new understandings about what will generate progress on results.

IN SUMMARY

Although frequently overlooked, modeling is a helpful technique to improve your chances of success, because great design and plans come from great models. We suggest iterative versions of models are co-created through a disciplined process that tests and retests quality. Models can be greatly influenced by unintentional omissions (blind spots), myths, politics, persuasions, and perceptions. Logic, scale, and specificity all have a bearing on models, too. A simple way to explore model quality is the application of SMART and FIT principles. We suggest a mark up as a good way to critically review your program logic model.

LEARNING RESOURCES

Reflection

1. Given how subjective program logic models are, what are the implications for the outside “reader” of a model? What does a model that will be read and perhaps used by those other than those who constructed it have to communicate?
2. What role might politics, persuasion, or perception play in how a model might be created, tested, and improved? How do these issues influence model quality and use?
3. What prevailing myths might influence choices in your workplace or family? How do blind spots influence choices?
4. How might the improvement process for a simple, single-site project model be different from that for a more complex multisite, multilevel initiative? What concerns should the model development team be sure to address, and what aspects of the model will be most important to communicate?
5. Can a complex, comprehensive program be effectively modeled with a single diagram? Why or why not? How would you approach a task like this?

Exercises

1. Imagine what a strand focused on marketing might look like to promote an innovative new hearing aid. Make an assignment for individuals to illustrate this strand. Give them all the same amount of specified financial resources over 12 months and tell them the desired outcome is maximum sales volume. Then, ask them to name their target market and key activities in the marketing strategy. Compare and contrast versions each participant creates. What assumptions, knowledge, or evidence accounts for the differences in how the marketing strands are constructed? What criteria are useful for reconciling these different illustrations?
2. Consider the questions raised in Figure 4.3 about the Community Leadership Academy program logic model. How would you answer them? What would the model look like once those questions had your answers? Draw it and discuss the implications of your response to the mark up.

Consider the questions raised in Figure 4.4 about the Health Improvement Program. How would you answer them? What would the model look like once those questions had your answers? Draw it and discuss the implications of your response to the mark up.

3. Draw a logic model for learning a foreign language. Ask a colleague to conduct a mark up using SMART and FIT on the models. What might change? How? Why?

References and Supplemental Readings

Texts

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Internet Resources

- Burke, M. (n.d.). *Tips for developing logic models*. Retrieved December 7, 2011, from http://www.rti.org/pubs/apha07_burke_poster.pdf

In addition to practicing the review steps on your own models, there are many other examples of logic models to work from available on the Internet. For several different approaches, see the following:

- Duigan, P. (n.d.) *Outcomes model listing*. Retrieved December 8, 2011, from <http://www.outcomesmodels.org/models.html>
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