

# Chapter 25

## Using Logic Models for Program Planning in K20 Education

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### ABSTRACT

*A well-designed logic model shows inter-connections within components of outreach programs, community projects, grant proposals, and even the design of a graduate internship. The logic model is a systematic display of inputs, outputs, outcomes, and impact on a community. One may define community as any group of people with a common vision, purpose, or problem. Relationships among people are the focal point for a community and the logic model can be used as a tool for fostering open communication within the community. The logic model is typically one of three approaches in design: 1) theoretical, 2) outcomes-based, or 3) activities approach. Use of a logic model ensures accountability for stakeholders, a tool for generating a common vision, and a method for reporting far-reaching impact as a result of activities identified for the model.*

### INTRODUCTION

In this age of accountability, government agencies, nonprofit organizations, and institutions of education are expected to demonstrate results achieved through human services programs (Government Accounting Office, 2002). Typically, the level of success is associated with change in human behavior. Measures for achieving goals use self-reported data which, when the only method of assessment, is limited in reliability. Logic models make it possible to evaluate the use of resources over time. Results are linked to goals within a particular setting and how each element within the model contributes or detracts from the entire

program. A logic model is a type of concept map. At the most basic and simplistic level, a map is usually two dimensional and, according to Wikipedia (2012), provides a “symbolic depiction highlighting relationships.” One can find his or her current location and re-orient toward the desired direction when using a map. Logic model maps provide the impetus for staying on course while providing the needed rationale for all people concerned in a project or program.

### TRENDS

There is ample evidence in the research literature to recommend use of logic models for educational, community health, and quality of life projects.

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Most projects require investment from diverse groups of stakeholders. Settings can be complex and goals multifaceted. Trends reported in the literature suggest there is much value in use of logic models to ensure goals are achieved and programs are sustained. Lane and Martin (2005) reported use of the logic model as a systematic and visual way to understand relationships among resources and activities for a women's public health program. Women in an underserved rural region were not receiving cancer screenings at the level needed for the size of the community. Program planners applied the use of a logic model template to develop a strong infrastructure in an effort to build a more sustainable program. Outcomes from the program included strategies to increase awareness, increased opportunities for screening, data collection, and methods for disseminating knowledge.

Logic models are also used in academic settings. Brown (2012) used logic models in the design of instructional technology internships. Graduate students in the program used logic templates and systematic planning to envision best practice experiences, make decisions for appropriate activities, and recommend valid measures for evaluating outcomes. Students moved from a somewhat disorganized method for writing proposals to a more strategic process that resulted in productive, theory-based internship experiences.

Cobigo, Morin, and Mercier (2012) designed a logic model to evaluate a medium-term residency service for teens and adults who have both intellectual and behavioral disorders. Serving populations with Intellectual and Developmental Disorders (IDD) is multifaceted and complex. Corbigo and her colleagues recognized the importance of evaluating all contributing factors associated with intervention. The use of the logic model approach seemed to provide the accountability template needed to evaluate the treatment program. Both process and physical setting were examined to determine ways to help IDD clients move to a less restrictive environment while also

improving quality of job satisfaction for the staff working at the facility. The literature reports use of logic models in a variety of settings with most being in community programs for health and human services, however in one unique project a logic model was used to promote positive youth development. Wells and Arthur-Banning (2008) used logic models with parks and recreation staff to maximize aspects for positive youth development. The model included a strong theoretical base with stakeholders valuing extensive reading and discussion of theory to practice activities. The relationship between goals and objectives, alignment with appropriate activities, and ways to measure outcomes resulted can lead to successful outcomes. A good starting place for use of a logic model begins with understanding the basic elements and variations of design.

## **DEFINING THE BASIC ELEMENTS OF A LOGIC MODEL**

The logic model is a picture of how an organization does its work. This picture, or image, is displayed against a backdrop that includes the theory and assumptions underlying the program (W. K. Kellogg Foundation, 1998). The basic elements of a typical logic model begin with the description of a situation or problem. Events, resources, and activities are coordinated and arranged to provide solutions and desirable impact on a community. For a team of stakeholders, the inputs can be quantified as what we use. The activities are what we do and outputs are described in terms of what has been done. The outcomes describe the difference we make. Short term outcomes can be described as learning or awareness, knowledge, attitudes, skills, opinions, dispositions, and motivation. Mid-term outcomes are more closely related to actions/behaviors, policies, social action, and demonstrated decision-making ability. Long term outcomes are a description of a vision realized. These are represented by goals achieved and

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