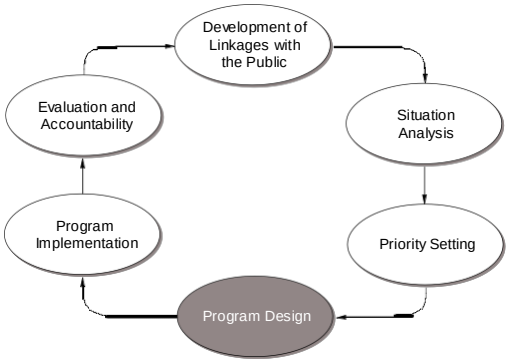
UK COOPERATIVE EXTENSION SERVICE
UNIVERSITY OF KENTUCKY — COLLEGE OF AGRICULTURE



Program Design

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Situation analysis helps Cooperative Extension identify issues of broad public concern which might become targets of Extension programming. Priority setting activities then help Extension professionals determine which of these public concerns most deserve Extension's attention. Then, once the focus of Extension's work is determined, programs are developed which address those identified concerns. That phase of the program development process is called ***program design***. A ***program plan*** is developed for each resulting ***program***.

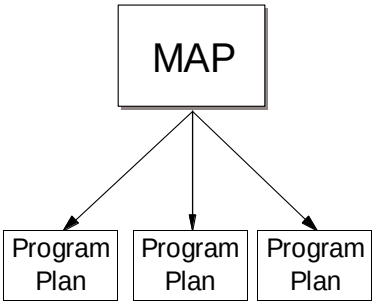
A well designed program will result in significant and lasting changes in people and the conditions in which they live. Consequently, a ***program*** is defined as ***a sequence of intentional actions and events organized in a manner that they result in valued outcomes for a clearly defined audience.***

There are several key words and phrases in that definition which merit further discussion. First, viewing a program as a ***sequence*** of actions and events suggests that a single activity, learning experience, or publication by itself is not likely to produce the type of significant and lasting changes described above. Second, the definition suggests that the ***actions*** and ***events*** are intentional in nature. They are selected because of their utility in producing desired outcomes. Third, the term ***valued*** suggests that the ***outcomes*** the program intends to bring about are intentional and desirable. Finally, the definition suggests that the designers of the program should be able to clearly articulate the ***audience*** the program targets.

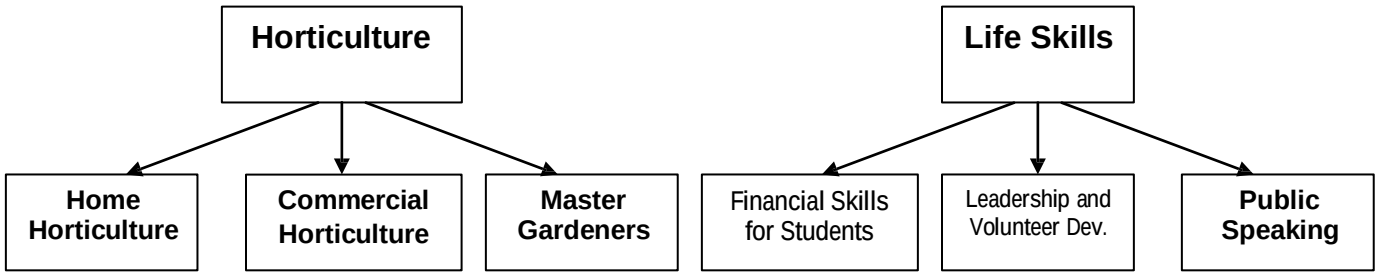
MAPs and Program Plans

Situation analysis and priority setting yield a set of high priority program thrusts called ***Major Areas of Programming*** or ***MAPs***. MAPs help to organize programs, efforts and results into manageable pieces. They are useful for communicating the nature of Extension's work to external stakeholders. But the scope of work included in a single MAP is frequently too broad to be represented by a single program plan. Instead, several program plans may be developed for a single MAP. For example, a county with five MAPs may develop more than five program plans. There is not a one-to-one correlation between MAPs and program plans. The diagrams at the top of the next page show the relationship between MAPs and program plans.

MAPS and Program Plans



Examples of MAPS and Program Plans in a Plan of Work



Design Teams

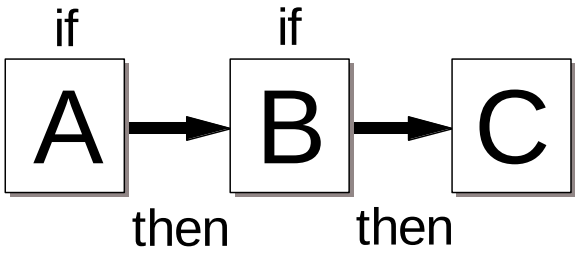
The County Extension Council (CEC) plays a major role in both situation analysis and priority setting. While the CEC may help to identify critical areas where programming is needed, it may not be practical to involve the full Council in developing detailed program plans for all MAPs in the Plan of Work.. This is best left to a smaller group called a ***design team***.

Some design teams are existing advisory councils. For example, the 4-H Council may develop the program plan for a specific youth issue. But other times it may be beneficial to create a new planning group that cuts across program areas and brings in new program partners.

A typical design team might include interested agents, council members, other Extension volunteers, local citizens, and representatives of collaborating organizations or agencies. While specific composition will vary by program, the design team should always involve more than just Extension staff.

The Logic of Programs

Embodied in the definition of a program is the notion of a logical "if-then" relationship between ***actions*** and ***outcomes***. The rationale for why specific actions should produce desired outcomes is called the ***program theory***. Program theory explains why the things we do should produce the results we intend.



Seldom, though, can a program theory be expressed as a simple two-element "if-then" relationship between actions and outcomes. More often, program theory is expressed as a chain of "if-then" relationships somewhat analogous to a chain of dominos standing on end. When one domino falls, it causes the next to fall and so on.

For a program on healthy eating, a more complete program theory would suggest that ***if*** the appropriate learning experiences are provided, ***then*** participants will experience a change in attitudes regarding the importance of healthy eating. It could be argued that such changes in attitudes are requisite to a change in eating behavior. ***If*** participants eat healthier foods, ***then*** they are likely to experience better health.

Many program theories are ***implicit***. In other words, they exist only in the mind of the programmer. How do we communicate this chain of "if-then" relationships to others? Through a framework called the ***logic model***.

Logic Models

Simply stated, ***a logic model is a picture of how a program is supposed to operate***. Logic models specify the chain of actions, events, or outcomes that a program intends to set in motion. The relationships between elements in the chain are presented as "if-then" relationships. We make assertions about these relationships based on research, experience, intuition, and other sources of knowledge. Logic models help make the theory behind a program explicit.

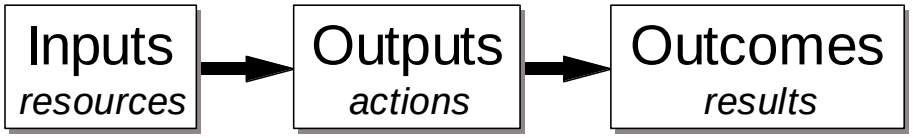
Some logic models are simple linear chains. Others are more complex and systems-oriented. While there is no prescribed formula for how a finished model should look, the benefits of using logic models in program development are clear and compelling.

Benefits of Logic Models

The W. K. Kellogg Foundation (2001) cites several benefits of using logic models in program development. First, logic models are instrumental in program development. They serve as a guide for program planning, a blueprint for implementation, and a framework for evaluation. Second, logic models can help us communicate our plans to others who may be contemplating an initial or continuing investment in that program. Third, logic models reflect a shared understanding of a program which results from facilitated dialogue among members of the design team. Finally, logic models serve as diagnostic tools to help us figure out why programs are not working as planned.

Basic Elements of Logic Models

Logic models are composed of inputs, outputs, and outcomes. Inputs support organizational outputs which, in turn, lead to valued outcomes.



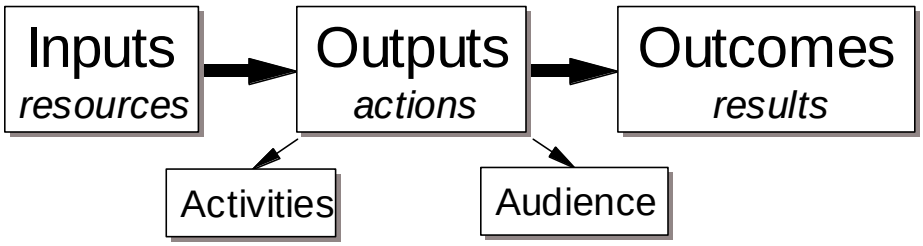
Inputs are the resources needed to conduct a program. Inputs include such things as time, money, paid staff, volunteers, materials, facilities, equipment, and the efforts of partners. Inputs are the costs of conducting a program.

Outputs are the things that an organization does with the inputs it commits to a program. Outputs are the specific actions taken by the organization in response to an identified need or issue – activities, events, services that reach the clientele or targeted audiences.

Outcomes can be defined as the results or changes which exists after a program is conducted. For the purpose of this publication, the term outcome is synonymous with the term results.

More About Outputs

Many logic models further define outputs by specifying both the nature of the organization's ***activities*** and the ***audience*** for which they are intended.

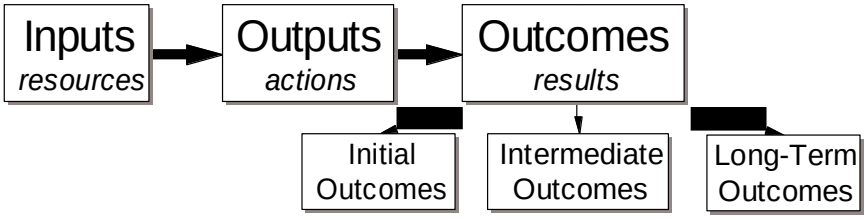


In Extension, ***activities*** are typically learning experiences provided to an audience we intend to reach. They include such things as workshops, field days, demonstrations, camps, training schools, newsletters, home visits, and a wide array of other learning experiences.

The activities, or things that the organization does, are usually directed toward a particular ***audience***. To be effective, logic models should clearly define the audience to be served by the program. The audience to be served influences both the content to be offered and the nature of the learning experience provided.

Types of Outcomes

In an attempt to strengthen program development activities among affiliated organizations, The United Way of America (1996) has developed a three-tiered framework for thinking about outcomes. Their model identifies initial, intermediate, and long-term outcomes.



They suggest that ***initial outcomes*** are the first benefits or changes that a participant experiences. Initial outcomes are typically changes in a participant's knowledge, opinions, skills or aspirations related to a particular topic. The acronym ***KOSA*** can be used to refer to these four types of initial outcomes (knowledge, opinions, skills, and aspirations).

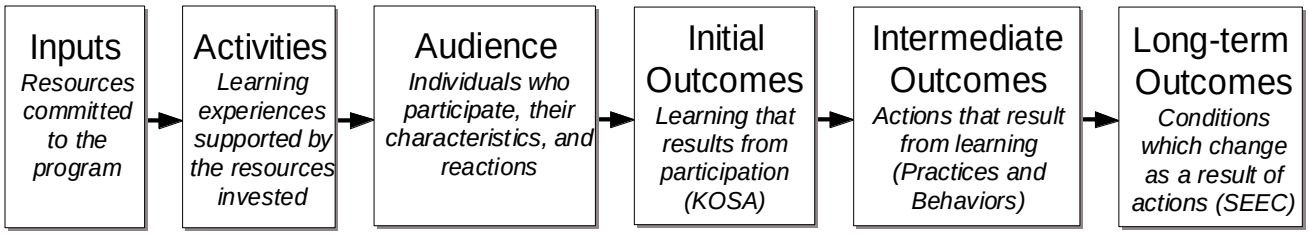
Intermediate outcomes are defined as changes in participant ***practices*** or ***behavior*s**. Intermediate outcomes link initial outcomes to more distant results.

Long-term outcomes tend to be the ultimate benefits that a program aims to produce. Most long-term outcomes can be categorized as being social, economic, or environmental in nature. The acronym ***SEEC*** has been developed to refer collectively to long-term changes in social, economic, or environmental conditions. Long-term outcomes can affect the participants themselves, other people, a community, or society in general.

It is important to point out that the "if-then" relationships discussed earlier also serve to link various types of outcomes together in a logical sequence. For example, program participants must become aware of a better way of doing something before they can be expected to change their behavior. If they actually change their behavior, then, social, economic, or environmental benefits can be expected to result from that action.

Putting It All Together

The illustration below incorporates all of the basic elements into a single diagram. At the far left, the model shows how inputs support the implementation of program activities. The activities which are conducted are targeted to program participants which have certain characteristics or needs. Through their involvement with the program, those participants gain knowledge, change their opinions, acquire skills, or aspire to change their behaviors. What participants learn is seen as instrumental in supporting changes in behaviors or practices. Such actions, in turn, produce changes in social, economic, or environmental conditions (on the far right).



As the program is implemented, events depicted in the logic model occur from left to right. But program planning begins on the right side of the model. The process of designing a program using a logic model framework can be seen as generating answers to a series of questions, with each question related to one of the basic elements of the logic model.

Here is a series of questions which may be asked of a design team during the process of building a program logic model.

- What changes in ***social, economic, or environmental conditions*** does the program seek to produce? That is, what are the long-term outcomes of our program?
- If such changes in conditions are to be realized, what must people do differently in terms of ***practices*** or ***behaviors***?
- If people are to change their behaviors or practices, what must they **know**? How must their ***opinions*** or attitudes change? What ***skills*** must they possess? What must they ***aspire to***? Be as specific as possible when identifying desired ***KOSA*** changes.
- Who is the audience that the program is intending to reach? What are the characteristics of the intended ***audience***? (There may be more than one target audience.)
- What ***activities*** or learning experiences will be most effective in producing the outcomes desired for each target audience?
- What ***resources*** are required to implement the learning experiences planned?

Once these questions are answered, the design team is ready to put their logic model on paper. Sometimes design teams will develop answers to these questions on separate sheets of flip chart paper and tape them to a wall to represent the program's logic model. Following the meeting, one or two members condense the logic model into a form more suitable for sharing with others. The worksheet included in this publication can be used for this purpose. This condensed logic model can then be entered into the program planning templates found in CATPAWS.

Revised 2007 by Charlene Jacobs, Martha Nall, Chuck Stamper, Jeanne Davis, Ralph Prince and John Mowbray as a part of the 2008-12 County Plan of Work Development Process.

Inputs	Outputs		Outcomes		
	Activities	**Audience**	**Initial**	**Intermediate**	**Long-Term**
Resources deployed to address situation	*Activities supported by resources invested*	*Individuals or groups who participate in the activities*	***Learning** that results from participation*	***Actions** that results from learning*	***Conditions** which change as a result of action*
Contextual Factors					