



UNIVERSITY OF
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FCS6009

EXTENSION

Institute of Food and Agricultural Sciences

Program Theory for Effective Extension Program Planning¹

Steve Jacob and Millie Ferrer²

Overview

Few Extension agents know that there are theories that have been developed to guide program development. This theoretical development has come about as a response to the way Extension programs have traditionally developed. One popular method has been called the “black box” method.

The Legacy of the Black Box

If you are an Extension professional working in today's world, you do not want to develop black box programming. Why not? Because the black box is plan-of-work programming that assembles the inputs, delivers them, then proceeds to measure the outputs.

In this model, if the black box represents the real world--we find ourselves on the outside, trying to look in. We stand outside the black box, delivering the “inputs” and expecting the “outputs.” We have no idea why the program may be a success or failure--it all happens inside the black box.

Today, it is not enough to teach a single seminar (or input), and reasonably expect behavior change

(or output). We need to know what works, how to enhance and maximize it. We also need to know what doesn't work and move on. That, in a nutshell, is program theory: practices designed to help us look inside that black box to see how things operate in the real world.

Looking Inside the Box

A program theory used extensively in Cooperative Extension is **Bennet's Hierarchy**. A model is presented here (*in the Figure*).

This model suggests that Extension agents should begin by following the model's down arrow, starting with assessing **social, economic, and environmental conditions** (often referred to as *SEEC*). Here are some questions that will start the planning process:

- What are the conditions within the county?
- Is there a situation that is less than desirable?
- If there are more than one such situation--which will have the most desirable pay-off?

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2. Steve Jacob, Ph.D., assistant professor, and Millie Ferrer, Ph.D., associate professor, Human Development, Department of Family, Youth and Community Sciences, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, 32611.

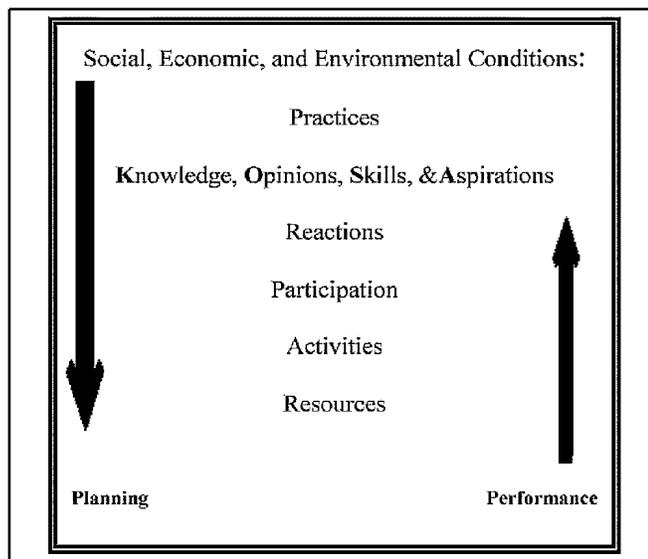


Figure 1. Bennet's Hierarchy --the Transparent Box.

The Practice of the Transparent Box

An Example--

For now, we'll assume that the county has a solid waste problem. You, as a team member, have determined through analysis that increased recycling could help reduce the waste stream in the county and conserve land-fill space and help the environment. *In a sentence: Increased recycling will have a positive economic and environmental impact.*

Step Two: Practices

The next step according to the model is to determine what **practices** must be adopted by people if you are to achieve the planned change in the social, economic, and environmental conditions.

In this example, this is easy to plan. You want to have people increase recycling to reduce the solid waste in the county. Specifically, you want county residents to:

- sort plastic, glass, metal, and aluminum from their household waste;
- properly compost organic materials; last
- compost yard wastes.

Step Three: KOSA

Next step in you plan? You need to determine what changes in **knowledge, opinions, skills, and aspirations** people will need absorb to adopt the practice of recycling.

Here are some questions to ask:

- Do people know what can be recycled (*knowledge*)?
- Do they know the principles of composting (*knowledge*)?
- What are their views on recycling and composting (*opinions*)?
- Are people able to sort different types of plastic (*skills*)?
- Do people want to save money and help the environment (*aspirations*)?

Step Four: Reactions

Next, the agent needs target **reactions** that will ensure participation in programming. This includes promotion and publicity. This may take the form of the agent covering one aspect related to the topic of recycling in newspaper articles or during one-shot seminars. Here, the focus must be on the benefits of recycling. The agent should be working on the goal of increasing **participation** of clientele for the in-depth programming that is more likely to impact behavior change. Such as a series of seminars on dealing with household waste might include sorting recyclables and techniques of composting food and lawn and garden materials.

Using this Program Model

Program Performance Cues

For program performance, the model explained here suggests that you start at the bottom of the hierarchy. You should use the necessary **resources** in order to conduct the **activities** that will generate **participation**. The **participation** in the program should lead to **reactions**, that impact the program

participant's **knowledge, opinions, skills, and aspirations (KOSA)**.

Changes in **KOSA** should lead to changes in the program participants **practices**, and with enough participation, the **social, economic, and environmental conditions** within the community will change

Particulars of this Model

In this particular model, the **activities** are integrated into a comprehensive plan that ultimately leads to behavior change. When planning such activities, the **resources** needed must be sufficient to make the activities successful. Where possible activities should use multiple teaching techniques.

A multiple-technique example would be

- giving the participants fact sheets on composting (*reading*),
- lecturing on composting (*hearing*), and finally,
- using the various composting techniques with hands-on demonstration (*doing*).

Resources in this example would include the agent's time--the most valuable resource; the fact sheets; meeting areas for seminars; and the location and materials for demonstration.

Program Performance Trouble-Shooting

When programs are not as effective as you feel they should be, this model helps you identify where there may be problems. These problems can then be fixed. That is the beauty of the transparent box in theory and practice. With black-box programming, there is little chance of identifying the cause or causes of programming failure.

Survival Tips:

1. When planning a program, remember Bennet's Hierarchy. The model can help you plan and deliver an effective program.
2. The model also offers help in producing your plans of work. The situation statement portion of the POW identifies **social, economic, and**

environmental conditions. Additional information about practices and **knowledge, opinions, skills, and aspirations** can be helpful in the situation statement in the form of baseline data. Plans for recruiting program participants, activities, and resources are all important components of the plan of work. Use the model to give your POW a solid underlying logic.

Further Information

Bennet, Claude, and Kay Rockwell. 1995. "Targeting Outcomes of Programs: An Integrated Approach to Planning and Evaluation." *In this handbook, Claude Bennet elaborates on his hierarchy with additional useful features.*

Bickman, Leonard, (ed.). 1987. "Using Program Theory in Evaluation." Published under the auspices of the American Evaluation Association. Jossey-Bass, Inc. San Francisco. *In this volume, attention is given to the program development process, to avoid the "black box" thinking in planning.*