Logic models to enhance program performance

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Where are you going?
How will you get there?
What will tell you that you’ve arrived?

A logic model is your program ROAD MAP
Logic model is a…

- Picture of your program or intervention
- Graphic representation of the “theory of action” – what is invested, what is done, and what results
- Core of planning and evaluation

Provides a common framework for your work
LOGIC

- the principles of reasoning
- reasonable
- the relationship of elements to each other and a whole

MODEL

- small object, representing another, often larger object (represents reality, isn’t reality)
- preliminary pattern serving as a plan
- tentative description of a system or theory that accounts for all of its known properties

The American Heritage Dictionary, 2nd Ed
The accountability era

• What gets measured gets done
• If you don’t measure results, you can’t tell success from failure
• If you can’t see success, you can’t reward it
• If you can’t reward success, you’re probably rewarding failure
• If you can’t see success, you can’t learn from it
• If you can’t recognize failure, you can’t correct it.
• If you can demonstrate results, you can win public support.

Re-inventing government, Osborne and Gaebler, 1992
Logic model is in widespread use

- Private Sector
- Public Sector: GPRA
- Non-Profit Sector
- International Arena
- Evaluators
Example: Every day logic model – Family Vacation

- Family Members
- Budget
- Car
- Camping Equipment

1. Drive to state park
2. Set up camp
3. Cook, play, talk, laugh, hike

Family members learn about each other; family bonds; family has a good time.
**Example: Financial management program**

**Situation:** Individuals with limited knowledge and skills in basic financial management are unable to meet their financial goals and manage money to meet their needs.

<table>
<thead>
<tr>
<th>INPUTS</th>
<th>OUTPUTS</th>
<th>OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extension invests time</td>
<td>We conduct a variety of educational activities targeted to individuals who participate</td>
<td>Participants gain knowledge, change practices and have improved financial well-being</td>
</tr>
<tr>
<td>and resources</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**WHAT WE INVEST**

**WHAT WE DO**

**WHAT RESULTS**
Example: One component of a comprehensive parent education and support initiative

**Situation:** During a county needs assessment, majority of parents reported that they were having difficulty parenting and felt stressed as a result.

**Inputs:**
- Staff
- Money
- Partners
- Research

**Outputs:**
- Develop parent ed curriculum
- Deliver series of interactives sessions
- Facilitate support groups

**Targeted parents attend**

**Outputs:**
- Parents increase knowledge of child dev
- Parents better understanding their own parenting style
- Parents gain skills in effective parenting practices
- Parents identify appropriate actions to take
- Parents use effective parenting practices

**Outcomes:**
- Improved child-parent relations
- Strong families

**Assumptions:**

**External factors:**
Example: Smoke free worksites

**Situation:** Secondhand smoke is responsible for lung cancer, respiratory symptoms, cardiovascular disease, and worsens asthma. Public policy change that creates smoke free environments is the best known way to reduce and prevent smoking.

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Outputs</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coalition</td>
<td>Assess worksite tobacco policies and practices</td>
<td>Increased awareness of importance of SF worksites</td>
</tr>
<tr>
<td>Time</td>
<td>Develop community support for SF worksites</td>
<td>Demonstrations of public support for SF worksites</td>
</tr>
<tr>
<td>Dollars</td>
<td>Organize and implement strategy for targeted worksites</td>
<td>SF worksites policies drafted</td>
</tr>
<tr>
<td>Partners Including youth</td>
<td>Worksite owners, managers</td>
<td>SF worksites policies passed</td>
</tr>
<tr>
<td></td>
<td>Unions</td>
<td>Adherence to smoke-free policies</td>
</tr>
<tr>
<td></td>
<td>Workers; union members</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Public</td>
<td></td>
</tr>
</tbody>
</table>

**Increased knowledge of SF worksite benefits & options**

**Increased commitment, support and demand for SF worksites**

**SF worksites**

**Adherence to smoke-free policies**
Example: Logic model training workshop

**Situation:** Funder requires grantees to include a logic model in funding request; grantees have limited understanding of logic models and are unable to fulfill the funding requirement.

**INPUTS**
- Trainer
- Budget
- Equipment
- Research base
- Training curriculum

**OUTPUTS**
- 3 hour training
  - Interactive activities
  - Group work
  - Practice
  - Q and A

**Grantees**
- Increase knowledge of logic models
- Increase ability to create a meaningful logic model of program
- Increase confidence in using logic models

**OUTCOMES**
- Use logic models in planning and evaluation – in your own work
- Model quality logic model practice
- Improved planning – programs achieve positive results
- Improved evaluation - more credible and useful data

[Accountable here]
Connecting outputs to outcomes is a challenge

“I think you should be more explicit here in Step Two.”
Programs aren’t linear

Feedback loops and multi-dimensions

INPUTS

OUTPUTS

OUTCOMES

Program investments
Activities
Participation
Short
Medium
Long-term

What we invest
What we do
Who we reach
Results
## Chain of outcomes

<table>
<thead>
<tr>
<th>SHORT</th>
<th>MEDIUM</th>
<th>LONG-TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seniors increase knowledge of food contamination risks</td>
<td>Practice safe cooling of food; food preparation guidelines</td>
<td>Lowered incidence of food borne illness</td>
</tr>
<tr>
<td>Participants increase knowledge and skills in financial management</td>
<td>Establish financial goals, use spending plan</td>
<td>Reduced debt and increased savings</td>
</tr>
<tr>
<td>Community increases understanding of childcare needs</td>
<td>Residents and employers discuss options and implement a plan</td>
<td>Child care needs are met</td>
</tr>
<tr>
<td>Empty inner city parking lot converted to community garden</td>
<td>Youth and adults learn gardening skills, nutrition, food preparation and mgt.</td>
<td>Money saved, nutrition improved, residents enjoy greater sense of community</td>
</tr>
</tbody>
</table>
Focus of outcomes

- **Individual**
  - Child, parent, client, resident

- **Group**
  - family, team, community
  - group

- **Agency, organization**

- **System**

- **Community**

  - Child is ready to enter school; farmer implements nutrient management practice
  - Families control spending to maintain family financial stability
  - Agency institutes policy that encourages physical activity of staff
  - Family serving agencies share resources to better meet clientele needs
  - Communities develop and preserve decent safe and affordable housing
## Writing good outcomes

**SMART objectives:** Specific, measurable, attainable, results-oriented, timed

<table>
<thead>
<tr>
<th>Who/what</th>
<th>Change/desired effect</th>
<th>In what</th>
<th>By when</th>
</tr>
</thead>
<tbody>
<tr>
<td>Families participating in the Family Resource Center</td>
<td>increase</td>
<td>their use of community resources and services</td>
<td>within one year of joining</td>
</tr>
<tr>
<td>4 school boards</td>
<td>adopt</td>
<td>policies to improve student nutrition and physical activity</td>
<td>by Dec 2005</td>
</tr>
</tbody>
</table>
What does a logic model look like?

• Graphic display of boxes and arrows; vertical or horizontal
  - Relationships, linkages

• Any shape possible
  - Circular, dynamic
  - Cultural adaptations; storyboards

• Level of detail
  - Simple
  - Complex

• Multiple models
Multiple logic models

Multiple models may be needed to describe and explain complex initiatives or systems.

1. Multi-level programs:
   A series of linked models that depict varying levels such as national-state-county levels OR, institution-division-unit levels

2. Multi-component programs:
   A series of models to depict various components (goals, sites, target populations) within a comprehensive initiative
## State level logic model: Reducing and preventing youth tobacco use

### Inputs
- Coalition Members
- Funding
- Partners
  - Local
  - Regional
  - State
- Research and best practices

### Activities
- Promote community involvement in restricting tobacco access to youth
  - Establish baseline of current practices
  - Inform/educate
  - Eliminate self-service
  - Facilitate active enforcement of laws
- Facilitate youth involvement in policy change
  - Recruit youth
  - Involve youth/adults
  - Educate
- Promote school and community-based prevention programs and policies
  - Establish baseline of existing resources
  - Educate
  - Assist with planning and implementing programs/services
- Promote youth cessation services and policies

### Reach
- Community
- Parents, Caretakers
- Law enforcement
- Retailer
- Health Department
- Community org, Businesses
- Policy makers
- Adults
- Youth serving org
- Youth
- Schools
- Community
- Families
- Youth serving org
- Youth

### Short
- Increased awareness of need to eliminate youth access to tobacco products, including tobacco industry tactics, laws, noncompliance
- Increased commitment to eliminate access/sources
- Increased knowledge and skills in participating in policy change
- Increased commitment by youth and adults for youth to participate in policy change
- Increased knowledge about tobacco dependence; benefits and options for youth prevention (e.g., CDC guidelines, school-family initiatives)
- Increased commitment to adopt effective programs/policies for youth prevention

### Medium
- Increased compliance and enforcement of laws and policies
- Decreased supply to minors
- Increased # of youth actively engaged in policy change
- Increased adoption of policy changes that involve youth in the change process
- Increased # of effective prevention programs or policies adopted
- Increased # of youth participating in prevention programs

### Long
- Decreased access to tobacco for minors
- Social norms less supportive of youth tobacco use
- Delayed average age at first use; reduced initiation
- Reduced morbidity and mortality

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See Treating Tobacco Addiction Youth Logic Model

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University of Wisconsin - Extension, Cooperative Extension, Program Development and Evaluation
Component Logic Model Youth: Youth Advocating for Policy Change

**Inputs**
- Coalition members
- Time
- Funding
- Partners: Local, Regional, State
- Effective practice strategies
- Local media outlets

**Activities**
- Establish baseline for policy change in community with help from youth
- Educate youth and adults on policy change options and how to achieve them
- Identify partners, including youth serving organizations and schools, for engaging youth in policy change
- Develop strategy for and promote engagement of youth in policy change
- Assist with development of youth advocacy skills
- Promote community support for youth involvement in community affairs/policy change

**Reach**
- Community organizations, businesses, policy makers
- Adults
- Youth serving organizations
- Schools
- YOUTH

**Outcomes - Impact**

**Short**
- Increased # youth, community members who:
  - Understand tobacco use issues in their communities
  - Know how to advocate for policy change
- Increased # youth wanting to be involved in advocating for policy change
- Increased # youth skilled in being able to advocate for policy change

**Medium**
- Increased adoption of policies that involve youth in the policy change:
  - Counter industry influence
  - Promote clean indoor air
  - Decrease availability of tobacco products in the community
- Increased number of tobacco policies in community
- Increased # of activities or increased intensity of activities that involve youth to accomplish policy change

**Long**
- Social norms less supportive of youth tobacco use
- Delayed average age at first use; reduced initiation

**Outcomes**
- Increased support for youth involvement in policy change
- Increased # of youth actively engaged in advocating for policy change in community
- Increased # of youth想要 to be involved in advocating for policy change
- Increased # of youth, community members who:
  - Understand tobacco use issues in their communities
  - Know how to advocate for policy change
- Increased # of youth, community members who:
  - Understand tobacco use issues in their communities
  - Know how to advocate for policy change

**Youth**
- Schools
- Community organizations, businesses, policy makers
- Adults
- Youth serving organizations
- YOUTH

**Component Logic Model Youth: Youth Advocating for Policy Change**

University of Wisconsin - Extension, Cooperative Extension, Program Development and Evaluation
Getting started

• Determine purpose of logic model
  - Who will use it? For what?
• Involve others
• Set boundaries for logic model
• Understand situation
• Explore research, knowledge base, what others are doing/have done
Check your logic model

1. Is it meaningful?
2. Does it make sense?
3. Is it doable?
4. Can it be verified?
Limitations

Logic Model...

• Represents reality, is not reality
• Focuses on expected outcomes
• Challenge of causal attribution
  ✓ Many factors influence process and outcomes
• Doesn’t address: Are we doing the right thing?
Where does evaluation fit?

From beginning to end
PLANNING: start with the end in mind

Program Action

Inputs
- Outputs
  - Activities
  - Participation
- Outcomes - Impact
  - Short Term
  - Medium Term
  - Long Term

Priorities
- Situation
  - Needs and assets
  - Symptoms versus problems
  - Stakeholder engagement
- Intended outcomes

What we do
- Conduct workshops, meetings
- Deliver services
- Develop products, curriculum, resources
- Train
- Provide counseling
- Assess
- Facilitate
- Partner
- Work with media

Who we reach
- Participants
- Clients
- Agencies
- Decision-makers
- Customers

What the short term results are
- Learning
- Awareness
- Knowledge
- Attitudes
- Skills
- Opinions
- Aspirations
- Motivations

What the medium term results are
- Action
- Behavior
- Practice
- Decision-making
- Policies
- Social Action

What the ultimate impact(s) is
- Conditions
- Social
- Economic
- Civic
- Environmental

Assumptions

External Factors

Evaluation

What do you want to know? How will you know it?

EVALUATION: check and verify
What does evaluation mean to you?

- Evaluation means asking good, critical questions about programs to improve programs and help them be accountable for the wise use of resources.
Develop parent ed curriculum

Deliver series of interactive sessions

Facilitate support groups

Targeted parents attend

Parents increase knowledge of child dev

Parents better understand their own parenting style

Parents use effective parenting practices

Parents identify appropriate actions to take

Improved child-parent relations

Strong families

Staff

Money

Partners

Research

EVALUATION: What do you (and others) want to know about this program?

What amount of $ and time were invested?

Were all sessions delivered? How effectively?

Did all parents attend that we intended? Who did/not not? Did they attend all sessions?

To what extent did knowledge and skills increase? For whom? Why? What else happened?

To what extent did behaviors change? For whom? Why? What else happened?

To what extent are relations improved? Does this result in stronger families?
Prioritize

Lots of questions and so little time

Prioritize evaluation questions

Evaluation purpose

• Need
• Context
• Process
• Outcomes

Stakeholder needs
Who wants to know what about your program?

<table>
<thead>
<tr>
<th>WHO might use the evaluation?</th>
<th>WHAT do they want to know?</th>
<th>HOW will they use the info?</th>
</tr>
</thead>
<tbody>
<tr>
<td>You – staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Funder</td>
<td></td>
<td></td>
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</tbody>
</table>
Developing an evaluation plan based on your logic model

| 1. Focus: |
|---|---|---|---|---|
| | | | Sources | Methods | Sample | Instruments |
| **Inputs** | | |
| **Outputs** | | |
| **Outcomes** | | |
http://www.uwex.edu/ces/Imcourse

http://www.uwex.edu/ces/pdande