Logic Models and Measurement

Leslie Carlson
Overview of Workshops

• **Today**: Logic Models and Measurement

• **October 18**: How to Create Effective Surveys

• **November 1**: How to use Excel to Analyze Data
Today

• Introductions
• Logic Models
• A sample logic model
• Measurable outputs and outcomes
• Ways to measure
What is a Logic Model?

It’s a diagram
What is a Logic Model?

A diagram that shows how your program is supposed to work

• Specifies program activities
• Shows how activities reach target populations
• List short, intermediate, and longer term outcomes
• Shows causal linkages
Logic Model

Other things you might include.

• Inputs – resources that you have to work with
• Environment – context you are working in
• Rationale – your theory about why this will work
• Assumptions
You can use different diagram formats
Terms in Logic Models

Inputs – resources that you have to work with

Outputs – Activities + participation

(Activities that have reached participants)

Outcomes – results/changes
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Key concept: a Logic Model is supposed to show how one thing causes another.
Example

A K-8 school identified poor student outcomes for several reasons including:

- Student truancy
- Inconsistent homework completion
- Child behavior problems during and after school

During parent conferences, parents said they had tried but weren’t always successful at holding their children to expectations about school.
Example

School officials and community members decided to offer a parenting education program.

They researched Evidenced-based programs and selected a good model for their community.

• Logic model – column format
• Logic model – flow chart format
Same logic model in a flow-chart format

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

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

**Targeted parents attend**

**Outcomes**
- 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

**Outcomes**
- Improved child-parent relations
- Improved school attendance

**Improved child behavior at school**
Logic Model

Why take the time to do this?
Let’s suppose this program didn’t work.

What do I mean by “didn’t work”?  
• What was the problem?  
• What were the goals?

Where would you look to identify flaws or areas to strengthen?
New Example

• **Problem:** A rural community, Las Palomas, Arizona, has seen an increase in teens doing negative behaviors and crimes including disrespect at school, drinking, vandalism, theft, graffiti, fights, and pregnancies.

• **Action:** Community and school leaders observed that teens don’t have enough to do. They researched evidence-based programming for youth, and developed plans to offer pro-social activities for teens.

• **Goal:** Reduce numbers of school referrals, crimes committed by teens, teen arrests, and teen pregnancies.

• **Activities:** basketball, local band performances, dances, junior rodeo events, and fashion show. Partners include a local church and the high school.
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## Las Palomas Logic Model

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<td>Marketing materials distributed.</td>
<td>Youth have ties to positive adults.</td>
<td>Increased youth bonding with school &amp; community.</td>
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<td>• Hold scheduled activities.</td>
<td>Youth attend activities.</td>
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<td>• Collect data</td>
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Reduced # of:
- School referrals
- Teen crimes
- Teen arrests
- Teen pregnancies
Las Palomas leaders:

We’re going to need money to do this.
Donors and Grant Funders:

A lot of groups need money. If we give you money, what will result?
How to write measurable objectives

 Outputs -- Activities + participation
Activities or services that have reached recipients.

Outcomes
In what way are people (or other targets) different from the way they were before – because of this program?
Measurable Objectives

OUTPUTS - Elements to include:

• What will take place
• For whom (e.g., teens age 13-17 living in Las Palomas, AZ)
• By how much
• By when
• As measured by

Sometimes called “Process Objectives”
Measurable Objectives

OUTCOMES - Elements to include:

• What will be different than it was before
• For whom (e.g., teens age 13-17 living in Las Palomas, AZ)
• By how much
• By when
• As measured by

Sometimes called “Outcome Objectives”
Practice Writing Objectives

Form small groups of three people.

WRITE:
- One Process Objective (choose an output)
- One Outcome Objective (choose an outcome)

*Cheat sheet provided.*
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<td>Youth spend time in positive activities. Youth make friends with positive peers. Youth have ties to positive adults.</td>
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- **INPUTS**
  - School facilities
  - Church facilities
  - Volunteers

- **ACTIVITIES**
  - Plan and schedule activities.
  - Recruit & train volunteers.
  - Market activities to youth.
  - Hold scheduled activities.
  - Collect data

- **OUTPUTS**
  - Schedule of activities.
  - Trained volunteers
  - Marketing materials distributed.
  - Youth attend activities.
  - Database of records

- **Short Term OUTCOMES**
  - Youth spend time in positive activities.
  - Youth make friends with positive peers.
  - Youth have ties to positive adults.

- **Medium Term OUTCOMES**
  - Adults mentor youth.
  - Youth & adults create youth-led leadership teams for activity areas.
  - Increased youth bonding with school & community.

- **Long Term OUTCOMES**
  - Reduced # of: School referrals Teen crimes Teen arrests Teen pregnancies
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**Outside Agency: DELIVERABLES**

- **Youth spend time in positive activities.**
- **Youth make friends with positive peers.**
- **Youth have ties to positive adults.**
- **Youth spend time in positive activities.**
- **Adults mentor youth.**
- **Youth & adults create youth-led leadership teams for activity areas.**
- **Increased youth bonding with school & community.**
- **Reduced # of:**
  - School referrals
  - Teen crimes
  - Teen arrests
  - Teen pregnancies
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**Outside Agency:**
- **PUBLIC BENEFIT**
  - Youths spend time in positive activities.
  - Youths make friends with positive peers.
  - Youths have ties to positive adults.
  - Adults mentor youth.
  - Youths & adults create youth-led leadership teams for activity areas.
  - Increased youth bonding with school & community.
Evaluation — did things happen as we hoped and planned?
True or false

Program  = Survey Evaluation
Program Evaluation
How to measure the things in your logic model

• Define what’s important to measure.
• Have a plan for how this information will be used.
• Decide what’s feasible to measure.
• Decide on measurement methods, tools, schedules.
Define what’s important to measure

• You already started this process when you wrote measurable objectives.

• Program Fidelity – did the program get implemented as designed.
  – It’s not an Output or an Outcome, but is an important “Process Evaluation” topic.
  – Especially important if you used an evidence-based model.
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Increased youth bonding with school & community. | Reduced # of:  
School referrals  
Teen crimes  
Teen arrests  
Teen pregnancies |
What are ways to measure things in the logic model

• Service delivery records
• Observation
• Other 3\textsuperscript{rd} party records
• Written survey
• Interviews
Ways to measure things in the logic model

Service Records
• Sign-in sheets
• Case notes

Observation
• Take photos
• Use checklists

Other records
• School records
• Law enforcement data

Written survey
• Paper
• Online

Interviews
• Individual; group
• In-person
• Phone
Program Evaluation Plan

- What do you want/need to measure
- Measurement methods
- Specific tools/instruments
- Analysis metrics
- Measurement schedule
- Data entry and analysis
- Who is responsible
Next workshop

How to create effective client surveys
Resources

University of Wisconsin-Extension
Program Development and Evaluation
https://fyi.uwex.edu/programdevelopment/logic-models/

W.K. Kellogg Foundation
Logic Model Development Guide
Thank you!

Please complete the workshop feedback survey before you leave!