Logic Models to Support Program Design, Implementation and Evaluation

Karen Shakman & Sheila Rodriguez
Education Development Center
Monday, February 24th
3:45-4:45
Workshop Goals

• To introduce logic models as an effective tool for program and policy design, implementation, and evaluation

• To review the elements of a logic model

• To discuss the role and value of logic models in sub-grantee applications
## Agenda

<table>
<thead>
<tr>
<th>Session</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome and Overview</td>
<td>Sheila Rodriguez, REL-NEI</td>
</tr>
<tr>
<td>Introduction to Cases</td>
<td>Sheila</td>
</tr>
<tr>
<td>What is a Logic Model?</td>
<td>Karen Shakman, REL-NEI</td>
</tr>
<tr>
<td>Elements of a Logic Model</td>
<td>Karen</td>
</tr>
<tr>
<td>The Role of Logic Models in Your Work</td>
<td>Karen</td>
</tr>
<tr>
<td>Closing &amp; Next Steps</td>
<td>Karen</td>
</tr>
</tbody>
</table>
Case Examples

College Readiness Program & Blended Learning

What are the goals of the program or policy?

What do we want to know about it?
What Is a Logic Model?

- Where are you going?
- How will you get there?
- What will tell you you’ve arrived?
What Is a Logic Model?

• Framework for:
  – PLANNING
  – IMPLEMENTATION
  – MONITORING
  – EVALUATION

• Simplified picture of program/policy (theory of action)

• Graphic and explicit representation of relationships, assumptions, and rationale
What Is a Logic Model?

• A logic model is NOT:
  – A fully developed plan for a program or policy
  – An evaluation method
What Is a Logic Model?

Types of logic models:

✧ Theory Approach Models: conceptual, emphasize theory of change (program design)

✧ Activities Approach Models: activities and relationships; detailed steps (program management/implementation)

✧ Outcomes Approach Models: connect resources/activities with results/outcomes; may break up outcomes and impacts over time segments (program evaluation)
What Is a Logic Model?

Problem Statement

<table>
<thead>
<tr>
<th>Resources</th>
<th>Strategies and Activities</th>
<th>Outputs</th>
<th>Short-term Outcomes</th>
<th>Long-term Outcomes</th>
<th>Impact</th>
</tr>
</thead>
</table>

Assumptions
What Is a Logic Model?

Simplest form:

INPUTS → OUTPUTS → OUTCOMES
What Is a Logic Model?

Simplest form:

INPUTS → OUTPUTS → OUTCOMES
What Is a Logic Model?

Simplest form:

**INPUTS**  ➔  **OUTPUTS**  ➔  **OUTCOMES**

**Inputs**: What is invested in the program (money, people, time, space, etc.)

**Outputs**: What is done in the program (program strategies and activities)

**Outcomes**: What results (short- and long-term outcomes)
# What Is a Logic Model?

## Case: Blended Learning Program

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Outputs</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing technology infrastructure</td>
<td>Infrastructure audit completed</td>
<td>Teachers’ reported use of diverse instructional strategies increases</td>
</tr>
<tr>
<td>Technology integration staff person for three schools</td>
<td>Completion of 6 days of summer teacher professional development</td>
<td>Student engagement increases</td>
</tr>
<tr>
<td>Teachers’ enthusiasm in 3 schools</td>
<td>6 blended learning classrooms established</td>
<td>Student achievement on districtwide assessments improves</td>
</tr>
<tr>
<td>Technology integration grant</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### What Is a Logic Model?

Activity: Try it yourself (College Ready Case)

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Outputs</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
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<td></td>
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</tr>
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</table>
## What Is a Logic Model?

### Case: College Ready Program

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Outputs</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff</td>
<td>Course for parents</td>
<td>Parent involvement increases</td>
</tr>
<tr>
<td>Volunteer mentors</td>
<td>Mentoring students</td>
<td>College applications increases</td>
</tr>
<tr>
<td>School space and resources</td>
<td>Guidance meetings</td>
<td>College acceptance increases</td>
</tr>
<tr>
<td>Teacher time</td>
<td>Student meetings</td>
<td>College attendance increases</td>
</tr>
</tbody>
</table>
Elements of a Logic Model

- Problem Statement
- Resources (inputs)
- Strategies and Activities (outputs)
- Short-Term Outcomes
- Long-Term Outcomes
- Impact
- Assumptions
Elements of a Logic Model: Problem Statement

Problem Statement: The problem or challenge you face that the program is to address.

Questions to ask in defining the problem:
• What is the problem?
• Why is it a problem?
• For whom is it a problem?
• What do we already know about the problem? (through previous work, research, etc.)
Elements of a Logic Model: Problem Statement

**Problem Statement:** The problem or challenge you face that the program is designed to address.

**Case: Blended Learning**

- Students are not actively engaged in their learning
- Courses are sometimes monotonous
- Students have limited one-on-one attention from adults
- Students’ courses are not personalized
- Students are expected to all work at the same pace
Elements of a Logic Model: Outcomes

Outcomes: What difference does it make?
Elements of a Logic Model: Outcomes

**Outcomes:** What difference does it make?

Short-term → Long-term → Impact
Elements of a Logic Model: Outcomes

**Outcomes:** What difference does it make?

- **Short-term:** Most immediate and measurable results for the intended participants that can be attributed to the strategies and activities.
- **Long-term:**
- **Impact:**
Elements of a Logic Model: Outcomes

Outcomes: What difference does it make?

Short-term ➔ Long-term ➔ Impact

Most immediate and measurable results for the intended participants that can be attributed to the strategies and activities

More distant results that are anticipated as a result of the collection of strategies and activities
Elements of a Logic Model: Outcomes

Outcomes: What difference does it make?

**Short-term**
Most immediate and measurable results for the intended participants that can be attributed to the strategies and activities

**Long-term**
More distant results that are anticipated as a result of the collection of strategies and activities

**Impact**
Hoped-for outcomes of long-term implementation of strategies and activities, dependent on conditions beyond scope of program
Elements of a Logic Model: Outcomes

Outcomes: What difference does it make?

Short-term → Long-term → Impact

Increased contact with parents/guardians

Improved attendance
Improved academic performance

Increased % of students graduating from post-secondary
Elements of a Logic Model: Outcomes

Outcomes Checklist

• Important
• Reasonable
• Realistic
• Potentially negative
Elements of a Logic Model: Strategies and Activities

Strategies and Activities (outputs): What you propose to do to address the problem.

- Activities, services, events, products designed to address the problem

- Taken together, they are intended to lead to certain outcomes.
# Elements of a Logic Model: Strategies and Activities

**Strategies and Activities (outputs):** What you propose to do to address the problem.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Sequence</th>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop teacher training materials</td>
<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
<td>Professional learning</td>
</tr>
<tr>
<td>Deliver summer institute</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>Professional learning</td>
</tr>
<tr>
<td>Conduct technology audit</td>
<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
<td>Infrastructure</td>
</tr>
</tbody>
</table>

And so forth…
Elements of a Logic Model: Resources

**Resources (inputs):** The material and intangible contributions that are or could reasonably be expected to be available to address the problem.

- Money, materials, and equipment (material/tangible)
- Time, space, people, partnerships (intangible)
- Resources are inputs that allow us to create the strategies and activities that are designed to respond to the stated problem.
Elements of a Logic Model: Resources

**Resources (inputs):** The material and intangible contributions that are or could reasonably be expected to be available to address the problem.

<table>
<thead>
<tr>
<th>Intangible resources (College Ready Case)</th>
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<tbody>
<tr>
<td>Community mentors</td>
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<tr>
<td>Local university space for parent meetings</td>
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<tr>
<td>Volunteer college admissions directors for application workshop</td>
</tr>
<tr>
<td>Student volunteers for childcare at parent meetings</td>
</tr>
</tbody>
</table>
Elements of a Logic Model: Assumptions

**Assumptions:** Beliefs or ideas we have about the program and people involved, and the way we think it will work.

- Make explicit all implicit assumptions
- Assumptions can be internal and external
- Ask: What do we *know* and what are we *assuming*?
**Elements of a Logic Model: Assumptions**

**Assumptions:** Beliefs or ideas we have about the program and people involved, and the way we think it will work.

**Example: Blended Learning Case**

<table>
<thead>
<tr>
<th>Internal Assumptions</th>
<th>External Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The participating school leadership will continue to support the program;</td>
<td>Access to a range of modalities will increase student engagement;</td>
</tr>
<tr>
<td>Three staff will be sufficient to support the program in three schools</td>
<td>Increased student engagement will increase academic achievement</td>
</tr>
</tbody>
</table>
The Logic in Logic Models

The theory embedded in the model…

A series of if-then statements across the model
The Logic in Logic Models

The theory embedded in the model…

A series of if-then statements across the model

If: District invests in blended learning in 3 schools

Then: Instruction will be personalized and participating students will be more engaged

If: Increase in student achievement as measured by standardized assessment

Then:
Closing & Next Steps

What we’ve accomplished so far:

• Discussed the purpose of a logic model

• Presented the elements of a logic model
How can you use logic models in your work?

• Who is using LMs?
• How?
• What makes them useful?
• What more do you need to use them effectively in your work?
Thank You!

For any questions about this workshop, contact:

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