Developing Logic Models for School Improvement Systems

Jenna Zacamy & Angelica Herrera

1 / 9 / 2019
Agenda

1. Goals and Introductions
2. What Are Logic Models? An Overview
3. Identifying Logic Model Components
4. Building a Logic Model
5. Closing
Workshop Objectives

1. Increase knowledge of the:
   - general concept, purposes and uses of logic models
   - components that make up a logic model

2. Build capacity in understanding:
   - links between various components of school improvement programs
   - routes to support school improvement goals

3. Provide hands-on opportunities to develop logic models representative of school improvement programs
Introductions

- Name
- Affiliation
- What you hope to learn about logic models
- 2-3 critical components of your school improvement efforts
What are Logic Models: An Overview
Logic Models and School Improvement

What are the components of school improvement?

- New instructional programs
- Staffing decisions
- Accountability and performance ratings
- Parent engagement
- Continuous improvement
- Progress monitoring and evaluation
- Budget & resource decisions
- Teacher or principal training/TA
- ???
- ???

- ???
- ???
• A graphical depiction of the logical relationship among the resources, activities and outcomes of a **program**, where a series of if-then statements connect the components

• A visual representation of the assumptions and theory of action that underlie the structure of a **program**
How Can I Use a Logic Model?

- Planning/Guiding Implementation
- Staff & Stakeholder Orientation
- Funding/Advocacy
- Program Management
- Evaluation

Sources: Kellogg Foundation, 2004; REL Pacific, 2014
ESSA and Logic Models

Level 1: Strong Evidence of Impact

Level 2: Moderate Evidence of Impact

Level 3: Promising Evidence of Impact

Level 4: Provides Rationale for Expecting Impact

Level 4 Evidence: Demonstrate a Rationale.

“To demonstrate a rationale, the intervention should include:

1. A well-specified logic model that is informed by research or an evaluation that suggests how the intervention is likely to improve relevant outcomes; and

2. An effort to study the effects of the intervention…”

Benefits

• Identify focus
• Provide a roadmap
• Establish common understanding of key system components
• Lay foundation for monitoring and evaluation

Challenges

• Determine scale and scope
• Use logic model as guidelines
• Incorporate ideas and opinions from various stakeholders
Identifying Logic Model Components
Articulating the Need, Resources, and Intended Outcomes

Clear understanding of:

- **Why** the program is needed
- **What** resources the program needs to succeed
- **What** will be done with those resources
- **What** results/changes should occur
- **Whom** the program will reach and benefit
The Program to Get Better

Oftentimes when adults get sick, they don’t have the time or energy to get the things they need to feel better fast. *The Program to Get Better* seeks to help these adults by providing them with Get Well Kits. Each Get Well Kit includes cold/flu medicine, homemade chicken soup, and a pamphlet that describes the benefits of rest and tips on how to prevent contracting a cold or flu. Instead of going to the store, buying medicine and soup ingredients, and then going home to make the soup, sick adults can pick up the kit and go straight home to take medicine, eat a bowl of hot soup, and begin resting much sooner. *The Program to Get Better* aims to provide sick adults with the resources they need to recover from their cold/flu and feel better as quickly as possible.
Let’s look at an example in education:

Transforming Teacher Talent (t3) System
Transforming Teacher Talent (t3) System

Why is the t3 system needed?

• Goal: To double the number of highly effective teachers, as measured by Aspire Instructional Rubric
• Teachers need: Greater access to PD, more support to prepare for observations, greater access and targeted PLCs with peers

What resources does t3 utilize?

• An expanded online PD content library and trainings
• Peer observation training and protocols
• Virtual Collaboration trainings and protocols
• Technology infrastructure (e.g., Google Hangout)
Transforming Teacher Talent (t3) System

What will be done with t3 resources?
• Aspire recruits and trains t3 leaders
• t3 leaders train, coach, and collaborate with school personnel

What results/changes will t3 resources and activities lead to?
• Increased access to individualized PD, more frequent feedback from and collaboration with principals, coaches, and peers
• Improved instructional practices
• Increase student achievement
• Greater understanding of best practices in teaching and coaching
• Better recruitment and retention of effective teachers
Transforming Teacher Talent (t3) System

Whom will the t3 system reach and benefit?

- Classroom teachers
- Instructional leaders
- Students
- Aspire administrators
Identifying School Improvement Program Essentials

• **Why** your program is needed
• **What** resources your program utilizes
• **What** will be done with those resources
• **What** results/changes resources and activities will lead to
• **Whom** your program will reach and benefit
• A **graphical depiction** of the logical relationship among the resources, activities and outcomes of a program, where a series of if-then statements connect the components.

• A **visual representation** of the assumptions and theory of action that underlie the structure of a program.
Basic Components of a Logic Model

- **Inputs (Resources)**
  - Raw materials/resources needed to create and implement the program to attain the desired outputs and outcomes

- **Activities/Outputs**
  - The processes, actions, and events that are undertaken, using the program resources, to achieve the intended outcomes
  - Outputs are tangible, process-oriented results

- **Outcomes (Impacts)**
  - Changes in program participants’ knowledge, beliefs, and behaviors that occur due to involvement in the program
  - Overall enduring influences of the program on the participants or on the organization
Connections and Outside Influences

- Problem
- Inputs (Resources)
- Activities/Outputs
- Outcomes (Impacts)

Assumptions and External Factors
From Narrative to Logic Model

- **Why** your program is needed = Problem
- **What** resources your program utilizes = Inputs (Resources)
- **What** will be done with program resources = Activities/Outputs
- **What** results/changes resources and activities will lead to = Outcomes (Impacts)
- **Whom** your program will reach and benefit = Audience/Participants/Beneficiaries
Narrative to Logic Model: Program to Get Better

**Inputs (Resources)**
- Cold/ flu medicine
- Chicken soup
- Pamphlet on benefits of rest and how to avoid contracting colds and the flu

**Activities/Outputs**
- Sick adults take medicine
- Sick adults eat chicken soup
- Sick adults get rest
- Sick adults read pamphlet on benefits of rest and ways to prevent cold/flu

**Outcomes (Impacts)**
- Sick adults feel better
- Formerly sick adults take steps to prevent themselves from contracting a cold or the flu again
Simple Logic Model: t3

**Inputs (Resources)**
- Expanded online PD content library & trainings
- Peer observation training and protocols
- Virtual Collaboration trainings and protocols
- Technology infrastructure

**Activities/Outputs**
- Aspire recruits and trains t3 leaders
- t3 leaders train, coach, and collaborate with teachers
- Aspire collects data on best practices

**Outcomes (Impacts)**
- Teachers have greater access to PD, more feedback and collaboration with principals, coaches and peers
- Teachers improve instructional practices
- Increase student achievement
- Aspire admins gain greater understanding of best practices in teaching and coaching
- Aspire improves recruitment and retention of effective teachers

Teachers need: Greater access to PD, support to prepare for observations, access and targeted PLCs with peers.
Your Simple Logic Model

• Identify the problem
• Identify your program Inputs

• Identify your program Activities/Outputs
• Identify your program Outcomes

**Why** is your program needed?
**What** resources does your program utilize?
**What** will be done with program resources?
**What** results/changes will occur as a result of resources/activities?
Identifying Logic Model Components: Part II
Components of a Logic Model

Inputs → Activities/Outputs → Outcomes

Problem:
- Material and Non-Material Resources
- Activities, Participants, and Measures

Outcomes:
- Short-term
- Mid-term
- Long-term

Assumptions

External Factors
Simple t3 Logic Model

Inputs (Resources)
- Expanded online PD content library & trainings
- Peer observation training and protocols
- Virtual Collaboration trainings and protocols
- Technology infrastructure

Activities/Outputs
- Aspire recruits and trains t3 leaders
- t3 leaders train, coach, and collaborate with teachers
- Aspire collects data on best practices

Outcomes (Impacts)
- Teachers have greater access to PD, more feedback and collaboration with principals, coaches and peers
- Teachers improve instructional practices
- Increase student achievement
- Aspire admins gain greater understanding of best practices in teaching and coaching
- Aspire improves recruitment and retention of effective teachers
SMART Objectives

- **S**pecific
- **M**easurable
- **A**ttainable
- **R**esult-oriented and relevant
- **T**ime-bound
The (SMART) Program to Get Better

**Inputs**
- Cold/Flu Medicine
  - White blood cell multiplier
  - Fever Reducer
  - Vitamin C
- Chicken Soup
- Pamphlet on the benefits of rest and how to avoid contracting colds and flu

**Activities/Outputs**
- Sick adults take medicine for at least 3 days
- Sick adults eat chicken soup for at least 3 days
- Sick adults rest for at least 3 days
- Sick adults read at least ¾ of the pamphlet

**Outcomes**
- Increase in white blood cells
- Decrease in fever
- Increase in blood plasma acidity

**Short**
- Reduction in viral count

**Mid**
- Sick adults feel better

**Long**
- Formerly sick adults take steps to not get sick again

**Assumptions:**
- Adults can take all medicine
- Adults have normal immune systems

**External Factors:**
- Adult’s age
- Adult’s health (other than cold/flu)
# Making t3 Logic Model SMART

<table>
<thead>
<tr>
<th>Component</th>
<th>Input</th>
<th>Output</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Simple</strong></td>
<td>Peer observation training and protocols</td>
<td>Aspire trains Peer Observer</td>
<td>Teachers use new instructional practices</td>
</tr>
<tr>
<td><strong>SMART</strong></td>
<td>Peer Observer training materials around observation protocol and coaching teachers with different teaching qualities and rating scores</td>
<td>Aspire delivers New Observer training, certification assessment, and three unique additional trainings to Peer Observers during AY 2018/19</td>
<td>Teachers improve their instructional practices (Domain 2 of rubric) and the number of highly effective teachers doubles with three years</td>
</tr>
</tbody>
</table>
Identifying Connections

Inputs → Activities/Outputs
What activities will be carried out with the input?
What resources are needed to carry out the activity/output?

Activities/Outputs → Outcomes
If (activity/output), then (outcome).
What activities/outputs need to occur in order to reach an outcome?
**Inputs**
- Expanded online PD Content Library & trainings
- Peer observation training and protocols
- Aspire trainers
- Technology infrastructure
- Funding

**Activities/Outputs**
- **Aspire** delivers 4 trainings to PD Content Library leaders
- **Aspire** delivers 4 trainings to Peer Observers
- Aspire delivers 3 trainings to VCLs
- PD Content Library leaders deliver 4 trainings to school staff
- Peer Observers conduct at least 2 peer observations and coaching conversations to select teachers
- VCL recruits teachers and conducts 8-10 VCs to select teachers

**Outcomes**
- Teachers use new strategies and lesson plans
- More frequent and targeted feedback to improve practice
- Teachers utilize technology and other resources to improve teaching
- More data collected on best practices
- More targeted collaboration

**Assumptions**
- Teachers improve practice and # of highly effective teachers increase (as measured by PIR)
- Student achievement increases
- Aspire improves teacher recruitment and retention

**External Factors**
Before the Break

1. Review detailed t3 Logic Model (Handout 3)

2. Practice developing SMART component from your program (Handout 4)

3. Identify one relationship or connection between your program components (Handout 4)
Break
Logic Models for School Improvement: Issues to Consider
Building a logic model is a process

Collaborative

- Who would you need to include in this process?
- How might you encourage their participation?

Thoughtful

- What factors do you need to consider?
- What resources would be helpful to have?

Iterative

- How might you make this a living document?
Simple school improvement logic model

Inputs
- School Improvement framework
- PD model
- Microcredential platform
- District level support

Activities/Outputs
- Attend a 2-day leadership workshop
- Complete microcredential on instructional leadership
- Create peer networking opportunities

Outcomes
- Teachers receive better/more frequent feedback
- Principals increase knowledge of "best practices" in instruction
- Create mutual trust
- Improved instruction

Assumptions

External factors

To provide principals with support to effectively lead school turnaround efforts

Improved student outcomes

Improved schools
Backwards Mapping

**Inputs**
- School Improvement framework
- PD model
- Microcredential platform
- District level support

**Activities/Outputs**
- Attend a 2-day leadership workshop
- Complete microcredential on instructional leadership
- Create peer networking opportunities

**Outcomes**
- Teachers receive better/more frequent feedback
- Principals increase knowledge of “best practices” in instruction
- Create mutual trust
- Improved instruction
- Increase in collaborative professional discourse
- Improved student outcomes
- Improved schools

**Assumptions**
**External factors**
Integrating multiple programs
Building a Logic Model
A Logic Model Should…

- Fit onto a *single page* per program
- Provide just enough *detail*
- Reflect the opinions and perspectives of *various stakeholders*
- Present components in an *intuitive* progression

A Logic Model Should Not…

- Include *lengthy, detailed* descriptions
- Use *jargon* or terms that may be confusing
Building a Logic Model for your Program

• 15 minutes for Inputs & Assumptions
• 15 minutes for Activities/Outputs
• 15 minutes for Outcomes
• 15 minutes for External Factors
Inputs

The resources and contributions that you and others make to the effort, including:

- Time
- People (staff, volunteers)
- Money
- Materials
- Equipment
- Partnerships
- Technology

Source: University of Wisconsin-Extension, 2003
Assumptions

The beliefs we have about the program and the people involved, and the way we think the program will work. Assumptions underlie the decisions we make. Assumptions are principles, beliefs, and ideas about:

- Problem/situation
- Resources/staff
- Way the program will operate
- Knowledge/research base
- Participants: how they will learn, their behavior, motivations, etc.

Source: University of Wisconsin-Extension, 2003
Activities/Outputs

The activities, services, events and products that reach people (individuals, groups, agencies) who participate or are targeted.

What we do or offer: includes workshops, services, conferences, community surveys, facilitation, etc.

Measurable, process-oriented results.

Source: University of Wisconsin-Extension, 2003
Outcomes

The direct results or benefits for individuals, families, groups, communities, organizations, or systems

- Short-term outcomes can be observed almost directly after the program’s activities take place.
- Medium-term outcomes can be observed in the months or few years following the program’s activities.
- Long-term outcomes, or impacts, are the ultimate consequence or effects of a program.

Source: University of Wisconsin-Extension, 2003
Thinking about Outcomes

For each activity/output, ask yourself the following:

*If (activity/output), then (outcome)*
External Factors

The environmental factors that influence a program’s success. External factors may affect program implementation, participants and receipt of activities, the speed and degree to which change occurs, and staffing patterns or resources available.

Source: University of Wisconsin-Extension, 2003
Closing