Logic Models to Support Program Design, Implementation, and Evaluation

Session I: Learning about Logic Models

Hosted by the [insert alliance here]
Moderator:
Presenter:

Date
Time

Introductions

Workshop facilitator:

Participants:

Name and affiliation

Agenda

Introduction and goals	
Introducing the cases	
What is a logic model?	
Elements of a logic model	
The logic in a logic model	
Next steps	

Session I – Goals

- Introduce logic models as an effective tool for program and policy design, implementation, and evaluation
- Practice the elements of a logic model
- Provide guidance on the appropriate steps for building a logic model for a program or initiative

Case Examples

College-Ready and Blended Learning Programs

Activity I.1: Discussion of Cases

Consider one of the cases:

- What are the goals of the program or policy?
- What might we want to know about it?

What Is a Logic Model?

- Where are you going?
- How will you get there?
- What will tell you that you have arrived?

What Is a Logic Model?

A logic model:

- Provides a simplified picture of the relationships between the program inputs and the desired outcomes of the program
- Is a framework for:
  - Planning
  - Implementation
  - Monitoring
  - Evaluation
- Is a graphic and explicit representation of relationships, assumptions, and rationale

What Is a Logic Model?

A logic model is not:

- A strategic plan or a fully developed plan for designing or managing a program or policy
- An evaluation design or an evaluation method

What Is a Logic Model?

Types of logic models:

- Theory approach model: Conceptual, emphasizes theory of change (program design)
- Activities approach model: Activities and relationships, detailed steps (program management and implementation)
- Outcomes approach model: Connects resources and activities with results and outcomes, may break up outcomes and impacts over time segments (program evaluation)

What Is a Logic Model?

The simplest form of a logic model:

INPUTS → **OUTPUTS** → **OUTCOMES**

What Is a Logic Model?

The simplest form of a logic model:

INPUTS → **OUTPUTS** → **OUTCOMES**

Inputs: What is invested in the program (e.g., money, people, time, and space)

Outputs: What is done in the program (e.g., program strategies and activities)

Outcomes: What results from the program (i.e., short- and long-term outcomes)

What Is a Logic Model?

Case: Blended-Learning Program

Inputs	Outputs	Outcomes
Existing technology infrastructure Technology integration staff person for three schools Teachers' enthusiasm in three schools Technology integration grant	Infrastructure audit completed Six days of summer teacher professional development completed Six blended-learning classrooms established	Teachers' reported use of diverse instruction strategies increases. Student engagement increases. Student achievement on districtwide assessments improves.

What Is a Logic Model?

Activity I.2: Inputs – Outputs – Outcomes

Inputs	Outputs	Outcomes

What Is a Logic Model?

Case: College-Ready Program

Inputs	Outputs	Outcomes
Staff Volunteer mentors School space and resources Teacher time	Course for parents Mentoring for students Guidance meetings Student meetings	Parent involvement increases. College applications increase. College acceptances increase. College attendance increases.

Elements of a Logic Model

Problem Statement

Resources (inputs)	Strategies and Activities	Outputs	Short-Term Outcomes	Long-Term Outcomes	Impacts

Assumptions

Elements of a Logic Model

The elements of a logic model:

- Problem statement
- Short- and long-term outcomes
- Impacts
- Outputs
- Strategies and activities
- Resources (inputs)
- Assumptions

Elements of a Logic Model: Problem Statement

Problem statement: The problem or challenge that the program or policy is designed to address

Questions to ask in defining the problem:

- What is the problem or issue?
- Why is this a problem?
- For whom does this problem exist?
- Who has a stake in the problem?
- What is known about the problem (through previous work, research, etc.)?

Elements of a Logic Model: Problem Statement

Problem statement: The problem or challenge that the program or policy is designed to address

Case: Blended-Learning Program

- 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 all expected to work at the same pace.

Elements of a Logic Model: Problem Statement

Problem statement: The problem or challenge that the program or policy is designed to address

Activity I.3: Problem Statement

- Articulate a targeted and specific problem
- Avoid a problem statement that restates the program as a need

Elements of a Logic Model: Outcomes

Outcomes: What difference does it make?

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Short-term → Long-term → Impacts

Elements of a Logic Model: Outcomes

Outcomes: What difference does it make?

Short-term → Long-term → Impacts

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

Elements of a Logic Model: Outcomes

Outcomes: What difference does it make?

Short-term → Long-term → Impacts

Short-term	Long-term	Impacts
Most immediate and measurable results for participants that can be attributed to strategies and activities	More distant, though anticipated, results of participation in strategies and activities	

Elements of a Logic Model: Outcomes

Outcomes: What difference does it make?

Short-term → Long-term → Impacts

Short-term	Long-term	Impacts
Most immediate and measurable results for participants that can be attributed to strategies and activities	More distant, though anticipated, results of participation in strategies and activities	Desired outcomes of long-term implementation of strategies and activities, dependent on conditions beyond the scope of the program

Elements of a Logic Model: Outcomes

Outcomes: What difference does it make?

Case: College-Ready Program

Short-term	→	Long-term	→	Impacts
Increased contact with parents or guardians		Improved attendance and academic performance		Increased percentage of students graduating from postsecondary institutions

Elements of a Logic Model: Outcomes

Outcomes: What difference does it make?

Activity I.4: Focus on Outcomes

Who is the target?	What is the desired change? (action verb)	In what? (results)	By when?
High school seniors in three urban comprehensive high schools	Increase	Applications to postsecondary institutions	By June 2014

Elements of a Logic Model: Outcomes

Outcomes Checklist

- Important
- Reasonable
- Realistic
- Unintentional, possibly negative

Elements of a Logic Model: Strategies and Activities

Strategies and activities: What you propose to do to address the problem

Activities, services, events, and products:

- Are designed to address the problem
- Are, together, intended to lead to certain outcomes

Elements of a Logic Model: Strategies and Activities

Strategies and activities: What you propose to do to address the problem

Example: Blended-Learning Program

Activities	Sequence	Strategy
Develop teacher training materials	1st	Professional training
Deliver summer institute	2nd	Professional training
Conduct technology audit	1st	Infrastructure

And so forth…

Elements of a Logic Model: Strategies and Activities

Any questions so far?

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

Examples:

- Money, materials, and equipment (material/tangible)
- People, time, and partnerships (intangible)

Resources are the inputs that enable the creation of 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

Case: College-Ready Program

- Community mentors
- Local university space for parent meetings
- Volunteer college admissions directors for application workshop
- Student volunteers for childcare at parent meetings

Elements of a Logic Model: Resources

Intangible resources: What intangible resources are at your disposal?

Activity I.5: Intangible Resources

Brainstorm at least five nonmonetary resources that are available to you in a program you operate or manage.

Elements of a Logic model: Assumptions

Assumptions: Beliefs about participants, staff, the program, and how change or improvement may be realized

Make explicit all implicit assumptions:

- Assumptions can be internal and external.
- Ask: What is known, and what is being assumed?

Elements of a Logic model: Assumptions

Assumptions: Beliefs about participants, staff, the program, and how change or improvement may be realized

Case: Blended-Learning Program

Internal Assumptions	External Assumptions
• The participating school leadership will continue to support the program. • Three staff members will be sufficient to support the program in three schools.	• Access to a range of modalities will increase student engagement. • Increased student engagement will increase academic achievement.

Elements of a Logic model: Assumptions

Assumptions: Beliefs about participants, staff, the program, and how change or improvement may be realized

Activity I.6: Uncovering Internal and External Assumptions

What assumptions are you or your program making?

The Logic in a Logic Model

The theory embedded in the model…

A series of if-then statements across the model

The Logic in a Logic Model

The theory embedded in the model…

A series of if-then statements across the model

Case: Blended-Learning Program

If:	**Then:**	and **If:**	**Then:**
District invests in blended learning in three schools	Instruction will be personalized and participating students will be more engaged		Student achievement will increase as measured by standardized assessment

The Logic in a Logic Model

Activity I.7: If-Then Statements

Order the if-then statements in the example from the College-Ready Program case

Next Steps

What we have accomplished so far?

- Discussed the purpose of a logic model
- Presented the elements of a logic model
- Considered the logic embedded in a logic model

Next Steps

Ask yourself the following:

- Do I understand the elements of the logic model and how they differ?
- Who should I consult in developing the model? What colleagues and stakeholders should be participants in developing the logic model?
- Who will shepherd or see through the development of the logic model?
- How do I know we have captured the theory of action?
- How will we use the logic model?
- How will we ensure we make it a living document?

Next Steps

Your next steps…

Activity I.8:
What Are Your Next Steps with Regard to Logic Models?

Final Thoughts on Logic Models

Some final thoughts…

•Logic models are tools for program design, implementation, and evaluation.

•The process of developing a logic model is important: Engage stakeholders in developing a logic model.

•Logic models should be living documents and returned to frequently.

•Logic models are useful for evaluation but best when developed at the program design phase.

Thank You!

For any questions about this workshop, contact:

Logic Models to Support Program Design, Implementation, and Evaluation

Session II: From Logic Models to Program and Policy Evaluation

Hosted by the [insert alliance here]
Moderator:
Presenter:

Date
Time

Introductions

Workshop facilitator:

Participants:

Name and affiliation

Agenda

Introduction and goals	
Review of logic models	
Introducing evaluations	
Moving from logic models to evaluation questions	
Generating indicators	
Building an evaluation design	
Putting it all together	

Session II – Goals

- Reintroduce logic models as an effective tool, specifically for evaluation.
- Practice using logic models to develop evaluation questions and indicators of success.
- Provide guidance on how to determine the appropriate evaluation for a specific program or policy.

Review of Logic Models

A logic model is:

- A graphic representation of theory of change
- A framework for planning, implementation, monitoring, and evaluation

A logic models is not:

- A strategic plan or a fully developed plan for designing or managing a program or policy
- An evaluation design or evaluation method

Review of Logic Models

Problem Statement

Resources (inputs)	Strategies and Activities	Outputs	Short-Term Outcomes	Long-Term Outcomes	Impacts

Assumptions

College Ready Logic Model Excerpt

Problem Statement: Low-income high school students in selected communities attend college at a lower rate than their middle-class peers, leading to more limited opportunities, higher rates of unemployment, and lower earnings.

Resources	Strategies and activities	Outputs	Short-term outcomes	Long-term outcomes	Impacts
Partnership with 3 public high schools	Establish local college mentorship program.	Recruited adequate number of mentors for student cohort.	Participating students apply to at least one college on time.	Participating students are accepted to and attend college, remaining enrolled into the third semester.	Low-income students in participating communities attend college at the same rate as middle-class peers.

Assumptions: College attendance is desired goal for participating communities; high school leaders will remain consistent and support program; parents will show interest and participate in program.

Review of Logic Models

Questions to ask about your logic model:

- What elements of the logic model were hardest to develop?
- Is the problem statement the right "grain size"?
- Within the strategies and activities, did you identify overarching strategies?
- What assumptions did you uncover?
- What is the time frame for your outcomes?
- What are the impacts?
- What was your process for developing the model?
- What requires further explanation or discussion?

Introducing Evaluation

Evaluation asks the questions:

- Are we **successful**?
- Have we had an **impact**?
- What are the most **influential aspects** of the program?

Introducing Evaluation

Consider:

- Is the program or policy effective?
- Is the program or policy working as intended?
- What aspects of the program are working? What aspects are not working?

Timing:

- Ask these questions at the onset of program design.
- Involve stakeholders in the evaluation design.
- Invest early in designing a good evaluation.

Introducing Evaluation

Consider:

- Is the program or policy effective?
- Is the program or policy working as intended?
- What aspects of the program are working? What aspects are not working?

Activity II.1: How Will You Know?

Introducing Evaluation

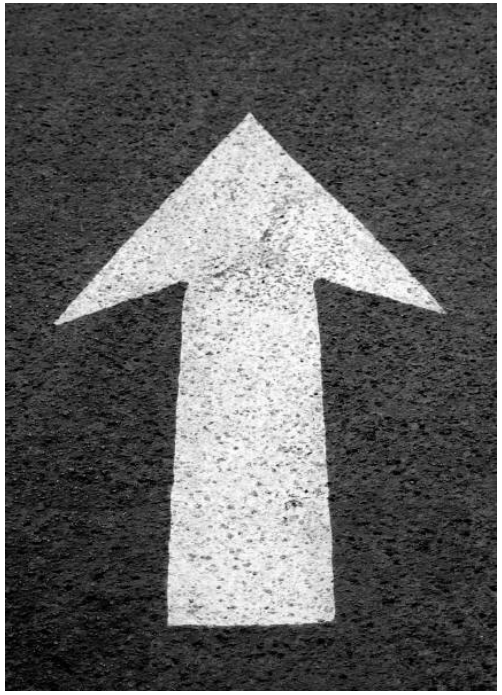
Most evaluations are designed to improve or prove:

- **Improve:** Formative evaluations focus on strategies, activities, and outputs. They are also called *process* or *implementation* evaluations.
- **Prove:** Summative evaluations focus on outcomes. They are also called *results* or *outcomes* evaluations.

Introducing Evaluation

Four types of evaluation:

- Formative
  - Needs assessment
  - Process evaluation
- Summative
  - Outcome evaluation
  - Impact evaluation



Moving from Logic Model to Evaluation Questions

Formative questions:

- Asked while program is operating
- For program improvement or midcourse correction

Summative questions:

- Asked at completion or after the program
- What was the result?
- Was it effective?

Moving from Logic Model to Evaluation Questions

Guidelines for good evaluation questions:

- Can the questions be answered given the program?
- Are the questions high priority?
- Are the questions practical and appropriate to the capacity you have to answer them?
- Are the questions clear and free of jargon?

Moving from Logic Model to Evaluation Questions

Activity II.2: Formative and Summative Evaluation

What is a formative evaluation question you have about a program or policy?

or

What is a summative evaluation question you have about a program or policy?

Moving from Logic Model to Evaluation Questions

When considering an evaluation, keep your audience in mind:

- **Audience:** Who wants to know?
  (participants, funders, staff)
- **Questions:** What does the audience want to know?
  (Is the policy helping? Did we reach the target population? How could the program be improved?)
- **Use:** How will results be used?
  (continued participation, program changes, funding)

Moving from Logic Model to Evaluation Questions

Audience	Typical Questions	Evaluation Use
Program staff	Are we reaching our target population?	Program operations
Participants	Is the program helping people like me?	Participation
Public officials	Who does the program serve?	Support, commitment, scale-up, and duplication
Funders	Is the program meeting its goals? Is the program worth the cost?	Ongoing funding, accountability

Source: W.K. Kellogg Foundation, 2006

Moving from Logic Model to Evaluation Questions

Activity II.3: Generating Questions for Different Audiences

Audience	Typical Questions	Evaluation Use
Program staff		
Participants		
Public officials		
Funders		

Moving from Logic Model to Evaluation Questions

Any questions so far?

Generating Indicators

Activity II.4:
How Do We Know If a Child Has the flu?

Generating Indicators

How will we know the program is successful?

Indicators of success…

Generating Indicators

Indicators are:

- Specific, measureable targets
- Seen, heard, read, and felt
- Connected to strategies, activities, outputs, and outcomes
- Evidence representing phenomenon of interest

Generating Indicators: Using the Logic Model

From the logic model

Inputs	Outputs	Outcomes or Impact
For example, resources (tangible and intangible)	For example, strategies or activities, participation	For example, short-term, long-term, impact

Generating Indicators: Using the Logic Model

From the logic model

Inputs	Outputs	Outcomes or Impact
For example, resources (tangible and intangible)	For example, strategies or activities, participation	For example, short-term, long-term, impact

Indicators

Amount of resources used

Generating Indicators: Using the Logic Model

From the logic model

Inputs	Outputs	Outcomes or Impact
For example, resources (tangible and intangible)	For example, strategies or activities, participation	For example, short-term, long-term, impact

Indicators

Amount of resources used	Number of workshops, number of participants

Generating Indicators: Using the Logic Model

From the logic model

Inputs	Outputs	Outcomes or Impact
For example, resources (tangible and intangible)	For example, strategies or activities, participation	For example, short-term, long-term, impact

Indicators

Amount of resources used	Number of workshops, number of participants	Number & percent who learned material, overall improvement

Generating Indicators: Using the Logic Model

From the logic model

Activity	Outcome
Deliver parent education classes	Parents understand college application process

Indicators

Number of classes delivered, number of parents attended	Number of parents reporting increased understanding

Generating Indicators: Using the Logic Model

Ask these basic questions:

- What would achieving the goal reflected in the outcome look like?
- How would we know if we achieved it?
- If I were visiting the program, what would I see, hear, or read that would tell me that the program is doing what it intends?

Generating Indicators: Using the Logic Model

Activity II.5: Process and Outcome Indicators

Look at the logic model and map a path:

Activity → Output → Outcome → Indicator

Generating Indicators: Using the Logic Model

Example: College-Ready Program

Activity	Deliver a set of parent workshops for college readiness
Output	Six workshops developed and delivered, 100 parents recruited to participate
Outcome	Parents increase their understanding of college application process
Indicators	*Process*: *Outcome:*

Generating Indicators: Using the Logic Model

Example: College-Ready Program

Activity	Deliver a set of parent workshops for college readiness
Output	Six workshops developed and delivered, 100 parents recruited to participate
Outcome	Parents increase their understanding of college application process
Indicators	*Process*: 70 percent of parents attend at least five of the six workshops. *Outcome:* 80 percent of students in program complete at least one college application by deadline.

Generating Indicators: Identifying the Right Indicators

From the logic model

Inputs	Outputs	Outcomes or Impact
Indicators		
Amount of resources used	Number of workshops, number of participants	Number & percent who learned material, overall improvement
Evaluation questions		
Were the inputs sufficient?		

Generating Indicators: Identifying the Right Indicators

From the logic model

Inputs	Outputs	Outcomes or Impact
Indicators		
Amount of resources used	Number of workshops, number of participants	Number & percent who learned material, overall improvement
Evaluation questions		
Were the inputs sufficient?	Were workshops implemented as intended? Well attended?	

Generating Indicators: Identifying the Right Indicators

From the logic model

Inputs	Outputs	Outcomes or Impact
Indicators		
Amount of resources used	Number of workshops, number of participants	Number & percent who learned material, overall improvement
Evaluation questions		
Were the inputs sufficient?	Were workshops implemented as intended? Well attended?	Did program change participant knowledge? Skill?

Generating Indicators: Identifying the Right Indicators

- One indicator to measure drop-out reduction =

Generating Indicators: Identifying the Right Indicators

- One indicator to measure drop-out reduction =
  - Graduation rate

Generating Indicators: Identifying the Right Indicators

- One indicator to measure drop-out reduction =
    - Graduation rate
- Several indicators to measure parent involvement =

Generating Indicators: Identifying the Right Indicators

- One indicator to measure drop-out reduction =
  - Graduation rate
- Several indicators to measure parent involvement =
  - Attendance at school meetings
  - Participation in parent–school organization
  - Parent calls made to the school
  - Attendance at school functions

Generating Indicators: Quantitative and Qualitative

Quantitative: Outcomes focused and summative

Qualitative: Process focused and formative

Generating Indicators: Quantitative and Qualitative

Indicators can be quantitative:

Evaluation Question	Indicators
Did the program increase students' interest in college?	Number of college applications completed

Generating Indicators: Quantitative and Qualitative

Indicators can be quantitative or qualitative:

Evaluation Question	Indicators
Did the program increase students' interest in college?	Number of college applications completed (quantitative)
	Guidance counselors report increased student interest (qualitative)

Final Considerations about Indicators

Remember, indicators may:

- Match the outcomes of interest or questions asked
- Be singular for a given outcome or question
- Be quantitative or qualitative
- Vary based on the audience

Building an Evaluation Design

Consider:

- **Purpose** of evaluation: Formative? Summative? Hybrid?
- **Audience**: Who is the audience for the evaluation? what do they want to know? How will the information be used?
- **Capacity**: Who will conduct the evaluation? What resources will be use? What is the time frame?
- **Priority**: What do you need to know?

Building an Evaluation Design: Identifying Appropriate Data Sources

Data collection:

- What are pre-existing data sources (e.g., school attendance records, existing survey data)?
- What are existing instruments (e.g., existing surveys measuring same constructs)?

Building an Evaluation Design: Identifying Appropriate Data Sources

Types of data:

- Administrative data
- Focus groups
- Interviews
- Observations
- Surveys
- Student test scores and grades
- Teacher assessments
- Other data sources

Building an Evaluation Design: Identifying Appropriate Data Sources

Activity II.6: Consider Data Sources

Data Source Brainstorm
Consider your own program: What relevant data sources do you already collect?

Building an Evaluation Design: Creating a Data Collection Framework

Data Collection Framework

Strategy or Activity	Output or Outcome	Formative	Summative	Indicator	Data Source	Data Collection Instrument	When Collected	By Whom

Building an Evaluation Design: Creating a Data Collection Framework

Data Collection Framework Example: College-Ready Program

Strategy or Activity	Output or Outcome	Formative	Summative	Indicator	Data Source	Data Collection instrument	When Collected	By Whom
Parent education strategy	High rate of parent attendance at workshops	✔		70 percent of parents attend five out of six workshops	Admin-istrative data	Attendance log at workshops	At beginning of each session	Program director
Parent education strategy	Increased parent under-standing of college application process		✔	85 percent of parents who attend more than four workshops report increased understand-ing	Parent feedback	Survey and interviews	Beginning of program, end of program	Program staff

Building an Evaluation Design: Creating a Data Collection Framework

Strategy or Activity	Output or Outcome	Indicator	Data Sources	Data Collection Instrument	When Collected	By Whom
Short Term						
Parent education strategy	Increased parent understanding of college application process	85 percent of parents who attend more than 4 workshops report increased understanding	Parent feedback	Survey and interviews	Beginning of program, end of program	Program staff
Long Term						
Student education strategy	Increased student understanding of the college application process	80 percent of students who attend the workshops apply to college and get accepted to at least one college or university	Student feedback	Survey and interviews	End of program	Program staff

Putting It All Together

If you have:

- Developed a logic model in collaboration with stakeholders
- Clarified who the audience is for the evaluation and how it will be used
- Identified and prioritized evaluation questions based on the logic model
- Selected indicators based on the outcomes of interest
- Identified data sources and a data collection plan
- Considered evaluation design, with awareness of resources, capacity, and timeline

Then…

Putting It All Together

Create an evaluation prospectus:

- What are you going to evaluate?
- What is the purpose of the evaluation?
- How will the results of the evaluation be used?
- What specific questions will the evaluation answer?
- What data sources will be necessary to answer these questions?
- How will the data be analyzed (evaluation design)?
- What resources are needed to conduct this evaluation?
- What is the timeline for the evaluation?
- How will the results be shared or disseminated?
- Who will manage the evaluation?

Putting It All Together

Timeline: Gantt chart

	January	February	March	April	May	June	July
Develop survey							
Select sample							
Administer survey							
Analyze survey							
Compare data to indicators							
Write up findings							

Review

- Logic models are a useful tool for program design, implementation, and evaluation.
- Planning for evaluation at the onset of program or policy development ensures an evaluation that is relevant and, potentially, more rigorous.
- Engaging stakeholders in the process of developing the logic model and evaluation encourages support and buy-in and increases authenticity.

Next Steps

Your next steps…

What is one thing you've learned or will take back with you to your colleagues?

Thank You!

- Contact Information:

For any questions: [Place name title and email here]