AGENDA

1. Welcome and Introductions
2. Introduction to Logic Models
3. Examples of Logic Models
5. Developing Logic Models: “How To” Guide
6. Whole Group Activity
7. Activity 1
8. Activity 2
9. Closing
WELCOME AND INTRODUCTIONS
AUDIENCE POLL

What is your experience with logic models?

a. I’ve developed/helped develop a logic model.

b. I’ve never been involved with the development of a logic model, but I have used at least one logic model in the past.

c. I’ve never developed or used a logic model.
What Is a Logic Model?

Logic Model

A visual depiction of a program’s theory of change or its progression through a sequence of actions that end in desired results.
WHAT IS A LOGIC MODEL?

U.S. Department of Education definition:

“A well-specified conceptual framework that identifies key components of the proposed process, product, strategy, or practices (i.e., the active “ingredients” that are hypothesized to be critical to achieving the relevant outcomes) and describes the relationships among the key components and outcomes, theoretically and operationally.”

(Federal Register, 78/156, 8-13-13 : Direct Grant Programs and Definitions That Apply to Department Regulations; Final Rule.)
Why Are Logic Models Useful?

A logic model can...

- Provide a clear “picture” of what your program does;
- Identify key outcomes of interest;
- Identify variables that can (or should) be measured;
- Identify “leading indicators” of program performance;
- Serve as a tool to guide program management;
- Serve as a tool to guide program evaluation; and
- Help build a shared understanding of a program’s purpose.
WHY ARE LOGIC MODELS USEFUL?

- Increased emphasis on logic models in updated Education Department General Administrative Regulations (EDGAR).\(^1\)

- Logic models can be used to show evidence of promise/strong theory.

BASIC LOGIC MODEL (OESE)

**INPUT**
Resources and/or barriers, which enables or limit program effectiveness

**PROCESS**
The activities, technologies, tools, events, technology, and actions of the planned program.

**OUTPUT**
Usually describes the size and/or scope of the services and products delivered or produced.

**OUTCOMES**
The changes expected to result (in 1-2 years) and often expressed at an individual level.

**RESULTS**
The changes expected to result (in 3-5 years) and often expressed at the organization level.

**IMPACT**
The changes expected at the system level (in 5+ years).

**INPUT**
What resources go into the program (e.g., money, staff, equipment) and/or what risk factors exist (e.g., attitudes, policies, geography)?

**PROCESS**
What critical activities does the program undertake (e.g., planning, educational leadership, staff training, development of instructional content, processes, and resources, classroom instruction and management, guidance counseling, assessments)?

**OUTPUT**
What is produced by those activities (e.g., plans, people trained, curricula, more effective teaching strategies, students served, hours of instruction, days of attendance)?

**OUTCOMES**
What short-term changes result from the activities (e.g., skills mastered, credits accrued, self-confidence increased, improved behavior, fewer disciplinary issues)?

**RESULTS**
What longer-term changes result from the services (e.g., school readiness, percent proficient in reading/math, gap reduction in student achievement, language proficiency)?

**IMPACT**
What is the aspirational goal (e.g., students graduating from high school college and career ready)?

Source: Department of Education: Office of Elementary and Secondary Education
Certain resources are needed to operate the program. If you have access to them, then you can use them to accomplish your planned activities. If you accomplish your planned activities, then you can deliver the service that was intended. If you deliver the services, then your participants benefit in certain ways. If these benefits are achieved, then certain changes in communities or systems might be expected to occur.
EXAMPLES OF LOGIC MODELS
THEN A MIRACLE OCCURS...
**LOGIC MODEL**

**PROJECT-SPECIFIC INTERVENTION**

**Target Population:** 4-year-old pre-K children

**Intervention:** Exposed to intervention

**Proximal Outcomes:**
- Positive attitudes to school
- Improved pre-literacy skills
- Learn appropriate school behavior

**Distal Outcomes:**
- Increased school readiness
- Greater cognitive gains in K
**Logic Model**
**Striving Readers Grantee**

### Inputs

- Computers and adaptive & instructional software
- CDs for independent reading
- High-interest literature – READ 180 paperback library in each classroom
- READ 180 eBooks (supplemented by District curriculum materials)
- READ 180 Flex books
- Scholastic Achievement Manager (SAM) – management system for READ 180 software programs
- Scholastic technical assistance (as needed)
- District director of language arts & literature
- District project manager
- District resource teacher coordinators (RTCs)
- READ 180 systems analyst
- In-school literacy coaches
- In-school technology coordinators
- Classroom observers (Westat)

### Professional Development/Support

**Teachers & Literacy Coaches**
- 3 days of whole-group training, or 1 half day of make-up training. Provided by Scholastic.
- 1 day of whole-group training on using student data to drive differentiated instruction. Provided by Scholastic.
- 1 day of whole-group training on interpreting READ 180 data reports. Provided by Scholastic.

### Activities

- Daily 90-minute instructional block.
- 20-minute whole-group instruction to start the class.
- Small group rotations in which students are divided into groups and spend 20 minutes in each group: (1) small group instruction, (2) modeled and independent reading, and (3) READ 180 topic software.
- 10 minutes of whole-group wrap-up to conclude the class.
- Teachers regularly use diagnostic tests (GRI) and Scholastic Achievement Management for continuous assessment, placement, and monitoring.
- No more than 21 students per class.
- Regular use of instructional strategies and materials contained in READ 180 program guides supplemented with district text, including independent reading of leveled texts, use of graphic organizers, and teaching of specific vocabulary.
- Student enrollment for the entire school year.
- Instruction follows e-Book scope & sequence

### Short-Term Outcomes

- Improved student reading skills
- Improved student engagement and behavior**
- Decrease in number of disciplinary incidents**
- Improved literacy instruction**

### Long-Term Outcomes

- Improved student reading skills
- Improved attendance
- Improved achievement across all subject areas**

Contextual effects such as the characteristics of the school district, other instructional programs in use, and external events may also influence outcomes.

*The RTC school sites supported both the whole-school and targeted interventions of the Newark Striving Readers program.

**These outcomes are not directly measured under the Newark Striving Readers grant.*
WORKING LOGIC MODEL:

TITLE III ENGLISH LANGUAGE ACQUISITION

INPUTS
Resources that go into a project
- Funding
- Department technical assistance and support
- Monitoring
- Regulations and Program Guidance
- Research
- Department influence
- Interagency/office coordination

PROCESS
Critical activities
- The Department provides grants to states, using data on the number of LEAs in the state
- State-level Title III activities (admin and TA) (e.g., other state-level activities)
- States make sub-grants to LEAs, either singly or as LEA consortia. Grants are based on the number of ELs in the LEA. States make immigrant children and youth grants to LEAs
- LEAs implement (a) high-quality, research-based educational program for ELs and (b) professional development for teachers LEAs that do not meet AMAOs for 2 and 4 years develop and implement improvement plans and can receive state technical assistance

OUTPUTS
Produced by activities
- SEA develops and implements a system of ELP standards, assessment, and accountability
- Technical assistance and guidance to LEAs
- General education teachers trained/provided high-quality PD
- ESL teachers trained/provided high-quality PD
- ELs served by high-quality ESL programming
- ELs served by high-quality general programming

OUTCOMES
Short-term (1-2 years) individual changes
- Improved SEA capacity for administering grants and services to LEAs
- Improved quality of services LEAs offer ELs
- Improvements in ESL teacher capacity as a result of professional development
- Improvements in general education teacher capacity as a result of professional development
- Annual increase in the number or percentage of children making progress in learning English (AMAO 1)
- Annual increase in the number or percentage of children attaining English proficiency (AMAO 2)

RESULTS
Longer term (3-5 years) organizational changes
- The percentage of limited English proficient students who score proficient or above on state reading and math assessments (GPRA)

SYSTEM CHANGES
(5+ years)
- Success hinges on:
  - Total available resources
  - Quality of after-school programs and curricula
  - Total hours programming provided and received
  - Grantee capacity
  - Teacher skill & capacity
  - Parent engagement

Implementation affected by:
- X-Factor: Title III is supplemental to other federal, state, and local resources
- Barriers and challenges
- Student background and characteristics
- Need to coordinate with other programs and services

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Logic Model Development: "How-To" Guide
“How-To” Guide

1 Create Logic Model Notes

Program Overview

- Bulleted statements about what your program does (or was intended to do), how it operates, issues with implementation, etc.
- Use available resources, including legislation, regulations, an approved application, etc.

Process Levels

- Consider – federal, state and/or district
- How many levels are involved in funding and program implementation? What happens at each level?

Accountability Measures/Expectations

- Are there program outcomes?
Draft the Visual Model

Refer to logic model notes and identify column components

- Use short, concise statements to describe components in each column.

- Be thoughtful about the timeline for achieving results (short-term versus long-term results).
**Your Planned Work**
- **Resources/Inputs:** Certain resources are needed to operate the program.
- **Activities:** If you have access to them, then you can use them to accomplish your planned activities.
- **Outputs:** If you accomplish your planned activities, then you can deliver the service that was intended.

**Your Intended Results**
- **Short-term Outcomes:** If you deliver the services, then your participants benefit in certain ways.
- **Long-term Outcomes:** If these benefits are achieved, then certain changes in communities or systems might be expected to occur.

WHOLE-GROUP ACTIVITY
**PD for Prekindergarten Teachers Logic Model**

<table>
<thead>
<tr>
<th>INPUTS</th>
<th>PROCESS</th>
<th>OUTPUTS</th>
<th>OUTCOMES</th>
<th>RESULTS</th>
<th>SYSTEM CHANGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources that go into a project</td>
<td>Critical activities</td>
<td>Produced by activities</td>
<td>Short-term (1-2 year) individual changes</td>
<td>Longer term (3-5 year) organizational changes</td>
<td>(5+ years)</td>
</tr>
<tr>
<td>Funding</td>
<td>ED provides grants to IHEs, SEAs, for-profits, nonprofits, or consortia</td>
<td>Grantees create and implement outreach and engagement activities to LEAs and equivalents</td>
<td>Grantees provide TA to LEAs and equivalents to build capacity at the local level</td>
<td>????</td>
<td>???</td>
</tr>
<tr>
<td>ED technical assistance and support</td>
<td>Grantees create and distribute toolkits to LEAs</td>
<td></td>
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<tr>
<td>Monitoring</td>
<td>Research</td>
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<td>Regulations and Program Guidance</td>
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<td>Education Influence</td>
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<tr>
<td>Interagency/Office Coordination</td>
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</tbody>
</table>

What information would most likely be used to complete the red box in the Process column?

a. ED provides TA to LEAs.
b. LEAs implement outreach, engagement, and PD with local prekindergarten teachers.
c. Increased LEA capacity use tools to provide services.
What information would most likely be used to complete the red box in the Outputs column?

a. Prekindergarten teachers receive training and professional development services, and education support.

b. Increased quality of prekindergarten teacher instructional practices.

c. Grantees facilitate a series of trainings for LEAs on how to use toolkits to improve practice.
What information would most likely be used to complete the red box in the Outcomes column?

a. Support to Institutions of Higher Education in providing professional development.

b. ED provides resources (e.g., curricula) to grantees.

c. Improved grantee capacity for administering grants.
PD FOR PREKINDERGARTEN TEACHERS LOGIC MODEL

**INPUTS**
Resources that go into a project
- Funding
- ED technical assistance and support
- Monitoring
- Regulations and Program Guidance
- Research
- ED influence
- Interagency/office coordination

**PROCESS**
Critical activities
- ED provides grants to IHEs, SEAs, for-profits, nonprofits, or consortia
- Grantees create and implement outreach and engagement activities to LEAs and equivalents
- LEAs implement outreach, engagement, and PD with local prekindergarten teachers
- Prekindergarten teachers receive training and professional development services, and education support
- Grantees create and distribute toolkits to LEAs

**OUTPUTS**
Produced by activities
- Technical assistance and guidance to grantees
- Monitoring of grantees
- LEAs receive services and toolkits
- Various types of materials and services are created and provided by the grantee to LEAs
- Prekindergarten teachers become aware of and commit to using high-quality early childhood education practices

**OUTCOMES**
Short-term (1-2 year) individual changes
- Improved grantee capacity for administering grants
- Increase in LEA capacity to engage prekindergarten teachers in professional development
- Increase in prekindergarten teacher knowledge and capacity
- Increase in percentage of early education workforce with two-year or higher degree providing high-quality instruction
- Increase in enrollment of prekindergarten children in coursework leading to a two-year or higher degree

**RESULTS**
Longer term (3-5 year) organizational changes
- Increase in percentage of prekindergarten children enrolled in high quality early education
- Increase in percentage of prekindergarten children entering kindergarten healthy and prepared to succeed

**SYSTEM CHANGES**
(5+ years)

**Success hinges on:**
- Total available resources
- Quality of programs and curricula
- Total hours programming provided and received

**Implementation affected by:**
- Barriers and challenges
- Local needs and workforce development strategies
LOGIC MODEL NOTES
1. What is the need or business case for the program?

Too few English learners (ELs) are performing at or above proficiency in reading and mathematics.

2. What is the purpose or goal of the program?

The goal is to help ensure LEPs attain English language proficiency and meet the same standards that all children are expected to meet.

3. Is there research supporting the program?

“Effective Literacy and English Language Instruction for English Learners in the Elementary Grades” identified effective and efficient strategies in improving ELs’ academic achievement.

4. Are there barriers or challenges to program implementation?

Barriers or challenges to progress include use of targeted funds for ELs and failure to keep parents of ELs and private schools informed.
5. Are short-term changes contingent on other factors?

Short-term changes are contingent on other factors, which include use of high-quality, research-based curricula.

6. What factors amplify the amount of change that will occur?

The level or amount of change can be amplified by factors that include parent outreach and family literacy activities.

7. How will you assess fidelity of implementation?

LEA and SEA fidelity of implementation is assessed using annual monitoring.

8. What are the program’s performance measures?

States must report on annual measurable achievement objectives (AMAOs), including making AYP for ELs (AMAO 3). The program must report on GPRA measures. Of the program’s seven GPRA measures, two may be of use as evidence of system change.
9. Describe responsibilities/activities at each level of program implementation.

- **Federal-level activities include:** Department formula grants to states, monitoring, and evaluation and performance assessment.

- **State-level activities include:** States can reserve 5% of grant money for administration, and align English language proficiency standards with state content standards.

- **Local-level activities include:** LEAs apply for a “formula” sub-grant, ensure teachers are fluent in English, and provide services to private schools.
Small-Group Activity 1
Break Into Groups
THEORY OF ACTION/LOGIC MODEL NOTES

• Share your program’s theory of change.
• Begin to draft logic model notes.
• Reminders:
  o What does your program do (or intend to do)?
  o How does it operate?
  o Which levels (e.g., federal, state, district) are involved in funding and program implementation, and what happens at each level?
  o Are there program outcomes?
  o Are there other considerations (e.g., factors that affect program implementation or success, assumptions about program implementation)?
QUESTIONS?
Small-Group Activity 2
Activity 2: Draft or Refine Logic Model

- Work with your project team to draft or refine your program’s logic model.
- Tips for developing or refining your logic model:
  - Consider starting with long-term outcomes and working backwards.
    - What do you want to accomplish and how do you get there?
  - Use the logic model to “tell the story” of your program.
- Share ideas and strategies.
QUESTIONS?
CLOSING COMMENTS
LOGIC MODEL REMINDERS

• Your model can be a “working logic model” and change over time.

• Logic models are excellent tools for program management.

• Eliminate unnecessary details from your model, as the goal is to depict the program’s theory of change at a high-level.

• Consider logic model development as an art and not a science.
QUESTIONS?
LOGIC MODEL RESOURCES
### Logic Model – Resources


THANK YOU!

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