Logic Model Development Guide

isbe.net

ILLINOIS STATE BOARD OF EDUCATION

Introduction

Strategic planning is a prerequisite for effective resource allocation and allows Local Education Agencies (LEAs) to implement and monitor programs and investments over time. ISBE has created this guide to support district leaders and staff as they evaluate significant investments aligned with strategic goals. LEAs can use a theory of action and a logic model to clarify specific challenges and develop plans for addressing them. These tools are intended to assist district teams in understanding which strategic investments are successfully improving student outcomes.

The five steps that are spelled out beginning below can enable LEAs to document a theory of action and a logic model. In Steps 1 and 2, LEAs develop a theory of action, which is a brief statement that clarifies the problem a district is trying to address as well as the desired outcome.[1] An effective theory of action is high level and simplified, essentially offering a direction that multiple proposed interventions can work toward. Steps 3-5 subsequently help district leaders transform their theory of action into a logic model.[2] Logic models outline specific interventions that can help a district achieve the outcome identified in the theory of action as well as define the inputs and outputs associated with those interventions. In essence, the theory of action clarifies the high-level goal or theory of change, while the logic model illustrates how the district could work toward testing that theory.

This guide can serve as a framework for clarifying strategic plans both internally and in conversations with local stakeholders. Communicating incremental progress toward short-, mid-, and long-term outcomes provides an opportunity to improve transparency in financial discussions and involve the public in budgeting and programmatic decision-making. It also is important to bear in mind that not all components of the guide are relevant to every district context or intervention. What follows is a framework for scoping out a challenge and proposed solution, but districts should feel free to tailor the material to best support their local needs.

Readers will find steps beginning below for identifying a theory of action and a logic model. Each step contains a single example; however, a more unified model can be found in Appendix I. Readers can find a template for drafting a theory of action and a logic model in Appendix II. Finally, the guide closes out with resources for using the logic model to communicate district priorities to interested stakeholders and the local community more broadly.

Step 1: Identify a Challenge

The first step is broad: Identify challenges or areas for growth in the school or district. These can be high level or concrete single sentence statements.

Example: Math teachers report that many of their students have critical gaps that they struggle to address through differentiated learning.

Step 2: Create a Theory of Action

Once district leaders have identified a handful of challenges, they can begin developing a theory of action. A theory of action articulates district goals and describes broadly what actions can help them achieve that goal. The challenges from Step 1 can be transformed into a theory of action using the following process.

1. **Reframe your challenge as measurable outcomes for success.**

[1] ISBE used language and content from Indiana's Train the Trainer Materials, produced by REL Midwest and the Indiana Department of Education, in the development of this tool.
[2] Lomax, E. (2023). Logic models: Charting a Path to Success. Rockville, MD: National Comprehensive Center at Westat.

For example, improve Illinois Assessment of Readiness (IAR) growth percentile in math for seventh graders.

2. **Develop actionable ideas.**
   For example, hire a math interventionist to support students struggling in seventh grade math.
3. **Connect actionable ideas to outcomes.**
   For example, hire a math interventionist to support students in seventh grade math and improve their IAR growth percentiles.

Step 3: Document Outputs and Outcomes

In Step 3, leaders specify the outcomes and outputs associated with each theory of action.

First, identify the intervention connected to each theory of action. Then, for each intervention, expand on the outcomes you are pursuing in the short (0-1 years), medium (2-3 years) and long-term (4-plus years). How would these outcomes be measured as outputs?

Intervention	Long-Term Outcomes	Medium-Term Outcomes	Short-Term Outcomes	Outputs or Measurements
Hire a math interventionist for seventh grade students.	Consistently see improvement in IAR growth percentile over time for seventh grade math.	Reduce the number of missing assignments. Improve formative assessment scores. Ensure math teachers feel more supported in the classroom.	Identify students in need of math support in seventh grade. Hire a part-time math interventionist.	IAR growth percentile in math Number of missing assignments for seventh graders in math Formative assessment scores in seventh grade math

Step 4: Document Necessary Activities

Now that district leaders have identified the desired outcomes, discuss the activities necessary to achieve the short- and medium-term outcomes. (The example below is for a short-term outcome.) While the long-term outcomes are important, it can be challenging to organize interventions around goals that may evolve or change over longer periods of time.

Intervention	Activities	Teams Involved	Weekly Time Commitment	Project Length	Accountability Measures
Hire a math interventionist for seventh grade students (short-term outcome)	Develop requirements for posting.	Administrative director in HR School administrators	2 hours	1 month	Post for position by [insert date].
	Interview candidates.	School administrators Math Department chair	2 hours	1.5 months	Secure at least [insert number] applications. Secure at least [insert number] viable candidates for interview.

Step 5: Document Inputs

Once district leaders have finalized the activities needed to realize the short- and medium-term outcomes, the final step is to describe the inputs and resources needed to facilitate these activities.

Activities	Major Cost Factors	Cost per Student	Funding Source	Data Source(s)	Risks
Develop requirements for posting.	N/A*	N/A	N/A	Previous math interventionist posts	N/A
Interview candidates.	N/A	N/A	N/A	Number of applicants Number Interviewees	Too few applicants. Candidates are underqualified.
Hire part-time math interventionist.	$35/hour for 20 hour/week Materials for interventionist ($100/week)	~ 350 seventh grade math students $80 per student	Evidence-Based Funding – New Tier Funding	Math interventionist timesheet	Push-in format ineffective in math classroom. Math interventionist is unable to meet the demand for math students.

* Costs with "N/A" are already functions of Human Resources, so for this example we presume these costs are already covered in expenditures for Human Resources personnel salaries.

Appendix I: Full Example

In the example on the next page, an LEA is using this Logic Model Development Guide to better define and evaluate supports for English learner (EL) students. In past years, the district has used Elementary and Secondary School Emergency Relief (ESSER) money to finance high-dosage tutoring for students across the district. However, since ESSER funds have expired, the LEA is considering focusing high-dosage tutoring on groups that have demonstrated greater need for academic support. Multiple schools in the example LEA have received a summative designation of Targeted to support the achievement of ELs, and district leaders are considering a more supplemental high-dosage tutoring initiative that supports these EL students. This example is meant to demonstrate how the Logic Model Development Guide could be used to address a specific challenge, but it is by no means comprehensive.

Step 1: Identify a Challenge

Multiple schools in the district have been identified as Targeted to support the achievement of English learners.

Step 2: Create a Theory of Action

1. **Reframe your needs as measurable outcomes for success.**
   For example, improve attendance and achievement of English learners in the district.
2. **Develop actionable ideas.**
   For example, offer supplemental high-dosage tutoring for English learners.
3. **Connect actionable ideas to outcomes.**
   For example, offer supplemental high-dosage tutoring to English learners in the district to improve attendance, help them complete assignments, and improve performance on formative assessments.

Step 3: Document Outputs and Outcomes

Intervention	Long-term Outcomes	Intermediate Outcomes	Short-term Outcomes	Outputs or Measurements
Supplemental high-dosage tutoring for English learners	Decrease chronic absenteeism among English learners by 30%.	Improve EL student attendance in classes by 20%. Ensure all student participants attend 90% of scheduled tutoring sessions.	Improve relationships between tutors and students/families. Enroll 50 English learner students in high-dosage tutoring intervention. Schedule tutoring sessions for each student 2x per week	Tutoring attendance
	Improve IAR growth percentile for English learners by more than 10%.	Ensure participants consistently have zero missing assignments at the end of every semester. Ensure participants are meeting formative assessment expectations in core subjects.	Improve relationships between tutors and students/families. Enroll 50 English learner students in high-dosage tutoring intervention. Schedule tutoring sessions for each student twice per week,	Student GPAs Illinois science tests Growth percentile – IAR Formative assessment scores

Step 4: Document Necessary Activities

Intervention	Activities	Teams Involved	Weekly Time Commitment	Project Length	Accountability Measures
Supplemental high-dosage tutoring for English learners	Tutor training	Instructional coach Assistant principal EL support staff	4 hours	1 month	Identify 10 tutors to participate by September 1. Train identified tutors by October 1.
	Tutor-parent outreach and enrollment	Tutors Assistant principal EL support staff	1 hour	1 month	Identify and reach out to 50 families of ELs by November 1.
	Weekly tutoring for six months	Tutors Assistant principal EL support staff Relevant teaching staff	15 hours per week per tutor	6 months	Weekly reports from tutors to assistant principal for student services on student progress Reports every other week to families on student progress. Check-in between tutors and teaching staff every other week.

Step 5: Document Inputs

Activities	Major Cost Factors	Cost per Student	Funding Source	Data Source(s)	Risks
Tutor training	Tutor salaries ($35/per hour) for four hours and 10 tutors Professional development salary/ consulting service for tutor training ($150/tutor) for 10 tutors Materials for tutor training ($30/tutor) for 10 tutors	50 students in program $70/student	Title III funding EL Evidence-Based Funding Other local sources	Tutor sign-up Tutor hour-tracking	Low student or family interest Low student attendance Tutor unpreparedness Low tutor attendance Difficulty scheduling
Tutor-parent outreach and enrollment	Tutor salaries ($35/per hour) for five hours and 10 tutors	50 students in program $35/student	Title III funding Evidence-Based Funding Other Local Sources	Student sign up Student attendance to tutoring session	Low student or family interest
Weekly tutoring for six months	Tutor salaries ($35/per hour, 15 hours per week) for 10 tutors Materials for tutors ($500/tutor)	50 students in program $205/student	Title III funding EL Evidence-Based Funding Other local sources	Student attendance Assignment completion	Low student attendance Frequent rescheduling (difficulty establishing a cadence) Tutor unpreparedness

Appendix II: Logic Model Template

Challenge Statement:

Theory of Action Statement:

Intervention	Long-Term Outcomes	Intermediate Outcomes	Short-Term Outcomes	Outputs or Measurements
Intervention 1	Long-Term Outcome A	Intermediate Outcome A Intermediate Outcome B	Short-Term Outcome A Short-Term Outcome B	Output 1 Output 2 Output 3
	Long-Term Outcome B	Intermediate Outcome A Intermediate Outcome B	Short-Term Outcome A Short-Term Outcome B	Output 1 Output 2 Output 3

Intervention	Activities	Teams Involved	Weekly Time Commitment	Project Length	Accountability Measures
Intervention 1	Activity 1	Team 1 Team 2 Team 3	Time Commitment 1 Time Commitment 2 Time Commitment 3	Project Length 1 Project Length 2 Project Length 3	Measure 1 Measure 2 Measure 3
	Activity 2	Team 1 Team 2 Team 3	Time Commitment 1 Time Commitment 2 Time Commitment 3	Project Length 1 Project Length 2 Project Length 3	Measure 1 Measure 2 Measure 3

Activities	Major Cost Factors	Cost per Student	Funding Source	Data Source(s)	Risks
Activity 1	Cost Factor 1 Cost Factor 2	~ Student Count (Cost Factor 1 + Cost Factor 2)/Student Count = **Cost per Student**	Funding Source 1 Funding Source 2 Funding Source 3	Data Source 1 Data Source 2	Risk 1 Risk 2 Risk 3
Activity 2	Cost Factor 1 Cost Factor 2	~ Student Count (Cost Factor 1 + Cost Factor 2)/Student Count = **Cost per Student**	Funding Source 1 Funding Source 2 Funding Source 3	Data Source 1 Data Source 2	Risk 1 Risk 2 Risk 3

Appendix III: Communications

The Logic Model Development Guide can be especially useful for communicating a district's challenges, planned interventions, and goals. Please find communication examples beginning on the next page that reference the logic model template in Appendix II. These example statements make use of the full example in Appendix I. These examples can help district leaders clarify strategic plans both internally and in conversations

with local stakeholders. The communication templates that cover challenges, interventions, and outcomes are targeted toward community members and interested members of the public. The template for activities, time commitment, and costs is more relevant to staff and district employees who may be involved in executing the planned interventions.
ISBE consulted materials created by the National Comprehensive Center in the development of these communication suggestions and examples.[3]

Communicating Challenges, Interventions, and Outputs Identified in Steps 1-3

Our district found that [challenge statement]. To address this challenge, we are [theory of action statement]. [One or two sentences describing intervention]. We will ensure this approach is meeting the needs of [students identified in challenge] by tracking some key metrics, such as [Output 1], [Output 2], and [Output 3].

Example Statement: Multiple schools in our district have received a summative designation of "targeted" to support the achievement of our English learner students. To address this challenge and better support this student population, we are investing in supplemental high-dosage tutoring. We will hire 10 tutors to support roughly 50 students in the program, and students will meet twice a week with their tutor over the next six months. Tutors will collaborate closely with the assistant principal for student services, relevant teaching staff and families to best support these students. We will ensure this approach is meeting the needs of our English learner students by tracking some key metrics including attendance, assignment completion, as well as IAR scores and growth percentiles.

Communicating Predicted Outcomes in Step 3

We are implementing [intervention], which aims to [Long-Term Outcome A] and [Long-Term Outcome B]. [Describe the importance and necessity of Long-Term Outcome A]. To accomplish this goal, we are working on [Short-Term Outcome A], which will allow us to [Intermediate Outcome A] and ultimately make progress toward [Long-Term Outcome A]. We will measure the success of [Intervention] by tracking [Output 1] and [Output 2].

Example Statement: We are implementing a supplemental high-dosage tutoring program for EL students that aims to decrease chronic absenteeism and improve the IAR performance for English learners. In recent years, several schools in the district have been identified as Targeted to support the achievement of English learners. As a district, we strive to promote educational equity and ensure that all students have the resources and support they need to thrive. To accomplish this goal, we are working on establishing better relationships between the district and students' families, which will allow us to ensure participant attendance in both core classes and tutoring sessions, so that ultimately we can reduce chronic absenteeism among English learners by 30% after three years of implementation. We will measure the success of the supplemental high-dosage tutoring intervention by tracking student involvement, attendance data, tutor reports, and performance in core classwork.

Communicating Activities, Time Commitments, and Costs in Steps 4-5

To support the [intervention], the district will be implementing [Activity 1] and [Activity 2]. [Describe the time commitment, project length, and teams involved in Activity 1.] To accomplish [Activity 1], the district will be investing in [Cost Factor A for Activity 1] and [Cost Factor B for Activity 1]. In total, this amounts to [Cost per Student for Activity 1]. To support the intervention, the district will draw upon [Funding Source 1] and [Funding

[3] Lomax, E. (2023). Logic models: Charting a Path to Success. Rockville, MD: National Comprehensive Center at Westat.

Source 2] and will evaluate the efficacy of the activities using [Data Source 1] and [Data Source 2] after [Project Length].

Example Statement: To support the supplemental high-dosage tutoring program for English learners, the district will be implementing initial tutor training as well as tutor-parent outreach and enrollment. The initial tutor training is critical to ensuring that the students enrolled in high-dosage tutoring are offered consistent support, aligned with up-to-date best practice. To train the necessary tutors for the program, the district will be investing in tutor salaries, professional development, and tutor materials. In total, this amounts to roughly $70 per student for the students participating in the intervention. To support the supplemental high-dosage tutoring project, the district will draw upon Title III funding and will evaluate the efficacy of the activities using data pertaining to student sign ups and training that has been completed by tutors.