

Evaluating the Impact of ARP/ESSER-Funded Programs Using Logic Models

Why Use Logic Models to Evaluate the Impact of ARP/ESSER-Funded Programs?

State education agencies (SEAs) and local education agencies (LEAs) face challenges implementing, monitoring, and evaluating programs funded by the American Rescue Plan (ARP) Act, such as high-dosage tutoring, afterschool programs, and summer learning and enrichment programs. To understand the impact of these and other activities, including those targeted at learning recovery/learning acceleration, SEAs and LEAs must define a challenge, select and implement an intervention, and articulate the intended outcomes of that intervention. Progress toward implementing the intervention and achieving expected outcomes can be measured with data that are routinely tracked by LEAs, such as attendance, course grades, test scores, etc.

A logic model can help SEAs and LEAs design a written plan to implement, monitor, and evaluate ARP/ESSER-funded programs. It creates a framework that outlines a path toward achieving short-, mid-, and long-term outcomes. It also serves as a framework that can allow SEA and LEA staff to communicate progress toward these outcomes to the media, school boards, parents, and other education stakeholders.

In the pages below, you will find examples of logic models for a high-dosage tutoring intervention and a summer learning and enrichment program. The logic models are accompanied by example statements that illustrate how to use elements of the logic models to communicate with stakeholders. We also include a blank logic model template with communication prompts for SEAs and LEAs to personalize for their own use.



Logic Model Example: High-Dosage Tutoring

Challenge: Multilingual-learner students need support to increase science achievement.

Intervention	Outputs	Short-term Outcomes (0–1 year)	Mid-term Outcomes (2–3 years)	Long-term Outcomes (4+ years)	Available Data
High-dosage tutoring in STEM for high school multilingual learners 1:1 student-teacher ratio 3x per week 36 weeks Provided during school day	# participants # tutors # multilingual tutors representing student population # tutor-parent connections (text, email, phone) # training sessions for tutors # of students eligible for tutoring session (APR) # of students participating in tutoring sessions (APR)	Build and improve tutor-student relationship Develop parent-tutor relationship	Improve student engagement and attendance in math and science courses	Decrease chronic absenteeism Increase on-track rate for HS graduation/de-identification of warning indicators for dropout	Attendance records: Monthly comparisons at the student level (daily, monthly, course/ period participation) Graduation rate Dropout rate
		Increase student interest in STEM Increase teacher/provider awareness of success gaps in STEM achievement	Increase enrollment in STEM courses Increase instructional time	Improve achievement in math and science Improve achievement in STEM courses Increase number of students pursuing STEM courses	State assessments in math and science Growth on quarterly performance assessments Grades in math and science courses Course-taking patterns
		Increase awareness of benefits of tutors of color	Increase in jobs created Increase in number of tutors of color	Strengthen educator pipeline for multilingual educators	Personnel records

Communication Examples

Here are some examples of how you can use the logic model to communicate with stakeholders about the need for the intervention, what you are doing, and what you expect to achieve.

- 1. Example Statement 1:** *Our district found that multilingual-learner students need support to increase science achievement. To address this challenge, we are investing in evidence-based, high-dosage tutoring in STEM for high school multilingual learners. The tutoring will have a 1:1 student-teacher ratio, will take place 3x per week for 36 weeks and will be provided during the school day. We will ensure that this approach is meeting the needs of multilingual learners by tracking some key metrics, such as # participants, # tutors, # multilingual tutors representing the student population, and the # tutor–parent connections (text, email, phone), among other things.*
- 2. Example Statement 2:** *We are implementing high-dosage tutoring to improve multilingual learners' achievement in STEM courses. Boosting achievement in STEM will open up more career pathways for these students. To accomplish this goal, we are working on increasing student interest in STEM, which will help us increase enrollment in STEM courses and improve achievement in these courses. We will measure the success of the program by tracking growth on quarterly performance assessments and by tracking grades in math and science courses.*

Here are some examples of ways you might use the logic model to respond to key questions from stakeholders.

- » **Example Question 1:** *We see your intervention is really focused on building relationships with the tutor. Why? Our students need to accelerate their learning—shouldn't you be more focused on grades and test scores?*
 - › **Example Answer 1:** *Developing a consistent, trusting relationship with a tutor is the first step toward Accelerated Learning. A trusted tutor develops a strong understanding of students' learning needs and can facilitate better relationships with teachers as well.*
- » **Example Question 2:** *Why is tutoring taking place during the school day? Shouldn't tutoring be extra learning time outside of the typical school day?*
 - › **Example Answer 2:** *We are implementing our tutoring program during the school day for two main reasons. First and foremost, research shows that tutoring sessions during the school day result in greater learning gains than sessions after school or during the summer. Second, some of our students who are more likely to benefit from tutoring may be the least likely students to show up outside of school hours. By holding sessions during the school day, we are increasing the likelihood that tutoring will reach the students who need it the most.*
- » **Example Question 3:** *What is the academic impact of your tutoring program? Have test scores increased?*
 - › **Example Answer 3:** *So far, we know that 54 tutors have provided over 5,000 tutoring sessions to 308 multilingual learners. About a third of our tutors are multilingual themselves, which has helped them communicate with students and their families. Soon, we will be able to report trend data on student attendance to see whether they are more engaged in school. Within the next month, we will be examining student growth on quarterly performance assessments and course grades. By the end of the summer, we will also report data on our 8th grade science assessment.*



Logic Model Example: Summer Programs

Challenge: Students who were disproportionately impacted by the pandemic need more instructional time and support to accelerate their learning.

Intervention	Outputs	Short-term Outcomes	Mid-term Outcomes	Long-term Outcomes	Available Data
Summer learning and enrichment program that includes <ul style="list-style-type: none"> Traditional classroom instruction 25 hours of Math 34 hours of Language Arts Small-group academic instruction (15 students per group) Social-emotional learning (SEL) curriculum Off-site field trips or other enrichment opportunities Expectations for attendance and participation 5 weeks 4 days per week 3 hours per day	# student participants XX% attendance XX% active participation # certified teachers and professional staff hired # other staff hired (tutors, reading interventionists, classroom aids, etc.) # small-group sessions with # of students # hours spent on Language Arts #hours spent on Math # SEL lessons # off-site field trips or other enrichment activities (e.g., outdoor learning, apprenticeships, community engagement) # community member participants	Progress in the rates of Language Arts homework completion Progress in the rates of Math homework completion Develop student connections within the small groups	Improve student engagement in academic instruction Improve rates of Language Arts homework completion Improve rates of Math homework completion	Maintain student engagement in academic instruction Maintain average daily attendance goals Improve scores on Language Arts formative assessments Improve scores on Math formative assessments	Attendance records Student grades Student standardized assessment scores from previous year (e.g., interim assessments, progress monitoring assessments, etc.) Weekly progress monitoring of summer learning targets
		Develop positive adult-child relationships Develop positive peer relationships	Improve students' awareness of their own social-emotional health Improve students' empathy toward their peers	Increase students' understanding of their own social-emotional needs Increase students' understanding of their peers' needs	Educator reports Student self-assessments SEL curriculum assessments
		Build student knowledge of learning opportunities outside of school Build student awareness of community challenges Build student awareness of opportunities in the community	Increase student access to learning outside of school (e.g., museums, theater, nature preserves, farms, places of employment) Increase community engagement Increase time spent with community members	Improve and maintain students' interest in learning outside of school Improve and maintain students' interest in community engagement and service	Attendance on field trips Attendance at community engagement opportunities Educator reports Student self-assessments

Communication Examples

Here are some examples of how you can use the logic model to communicate with stakeholders about the need for the intervention, what you are doing, and what you expect to achieve.

- 1. Example Statement 1:** *Our district found that students who were disproportionately impacted by the pandemic need more instructional time and support to accelerate learning. To address this challenge, we are investing in a summer learning and enrichment program that includes traditional classroom instruction, small-group instruction, social emotional learning opportunities, and off-site field trips. The summer learning program will run for six hours per day, five times per week, across eight weeks. We will ensure that this approach is meeting the needs of students disproportionately impacted by the pandemic by tracking some key metrics, such as the number of student participants, certified teachers and professional staff hired, small group sessions, field trips, and community member participants.*
- 2. Example Statement 2:** *We are implementing a summer learning and enrichment program to accelerate learning for students who were disproportionately impacted by the pandemic. By accelerating learning, we hope to improve student scores on language arts and math formative assessments. To accomplish this goal, we will develop student connections within small instructional group and improve rates of homework completion in language arts and math. We will measure success of the small group instruction with weekly progress monitoring of summer learning targets.*

Here are some examples of ways you might use the logic model to respond to key questions from stakeholders.

- » **Example Question 1:** *We see your summer learning program is really focused on field trips and time spent in the community. Why? Our students need to accelerate their learning—shouldn't you be more focused on grades and test scores?*
- › **Example Answer 1:** *Accelerating student learning is about more than test scores and grades. We want to build student knowledge about learning opportunities outside of school and develop life-long learners. Once students are aware of outside learning opportunities, we will help increase their access to museums, theaters, and places of employment so that they can develop interests outside of school that motivate them to learn.*
- » **Example Question 2:** *Why do you focus on social emotional learning? If students need to get back on grade level, shouldn't your focus be academic?*
- › **Example Answer 2:** *We are implementing social emotional learning into our summer learning and enrichment program because we found that many students exhibit challenging behaviors that hinder academic learning. Through our social emotional learning curriculum, we hope to rebuild positive peer relationships that will improve students' empathy toward their classmates. When students develop this empathy, challenging behaviors may decrease, which gives us a positive environment for academic learning. We will track the impact of our social emotional learning curriculum using educator reports, student self-assessments, and embedded curriculum assessments.*
- » **Example Question 3:** *What was the academic impact of your summer learning and enrichment program? Have test scores increased?*

› **Example Answer 3:** *So far, we know that 420 students participated in the program this summer. We recruited 14 certified teachers and 23 additional staff members to run our program. Each of the students participated in daily classroom instruction and three small group sessions per week to work on reading and math. Based on our weekly progress monitoring, we know that over 80% of students met their summer learning target. In the coming year, we will continue to track student progress using grades and standardized assessments.*

Logic Model Template

Challenge: [Challenge Statement]

Intervention	Outputs	Short-term Outcomes (STO) (0-1 year)	Mid-term Outcomes (MTO) (1–2 years)	Long-term Outcomes (LTO) (4+ years)	Available Data
Intervention Name	Output 1	STO 1A	MTO 1A	LTO 1A	Data 1A
Descriptor 1	Output 2	STO 1B	MTO 1B	LTO 1B	Data 1B
Descriptor 2	Output 3	STO 1X	MTO 1X	LTO 1X	Data 1C
Descriptor 3	Output 4				Data 1X
Descriptor 4	Output X	STO 2A	MTO 2A	LTO 2A	Data 2A
Descriptor X		STO 2B	MTO 2B	LTO 2B	Data 2B
		STO 2X	MTO 2X	LTO 2X	Data 2X
		STO 3A	MTO 3A	LTO 3A	Data 3A
		STO 3X	MTO 3X	LTO 3X	Data 3X

Communication template

Use the information that you insert into the logic model above to complete the statements below.

- Our district found that [challenge statement]. To address this challenge, we are investing in evidence-based [intervention]. [One or two sentences using descriptors of 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].*
- We are implementing [intervention] to achieve [LTO 1A] and [LTO 1B]. [One or two sentence statement about why LTO 1A is important]. To accomplish this goal, we are working on [STO 1A], which will help us [MTO 1A] and make progress toward [reminder of LTO 1A]. We will measure the success of the program by tracking [Data 1A] and [Data 1B]. [Add additional statement about additional LTOs, as desired.]*

This publication is in the public domain. While permission to reprint is not necessary, reproductions should be cited as:

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

The contents of this publication were developed under a grant from the U.S. Department of Education. However, the contents do not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the Federal government.

A copy of this publication can be downloaded from <https://www.compcenternetwork.org/>.