Smart Dollars: Evaluating Impact and ROI in Federal Programs

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Welcome & Introductions

Which of the following best describes you:

Purpose and Learning Goals

Purpose: Provide leaders with a framework that they can apply to programs and initiatives to ensure that these programs and initiatives yield the best outcomes for our students and educators.

Learning Goals

- Understand the purpose of a logic model and its usefulness in continuous improvement.
- Understand how to link the information from a logic model to the RoI for Continuous Improvement tool.
- Apply new knowledge of the RoI tool and logic models to create a logic model relevant to your own school/context.

Community of Practice Pilot
Data Driven Decision Making

4 Pilot Districts

Bertie County Schools: EDIA Math

Cumberland County Schools: ABE Alternative Behavior Educator

Dare County Schools: Tier 3 Interventionist

Whiteville City Schools: iReady

Pre Survey

How frequently does your district evaluate and monitor progress towards outcomes throughout the year?

How regularly does your district monitor the fidelity of implementation for key initiatives?

What percentage of your district's spending do you estimate is allocated to evidence-based strategies or resources?

How much carryover does your district typically have in consolidated federal funds from year to year?

What are some of the biggest barriers for district and school leaders that may prevent them from implementing continuous improvement cycles and monitoring for effectiveness?

STEPS

Process for Evaluating Impact and ROI in Federal Programs

1

Identify the Core Need(s)

Articulate key needs for your district or school based on available data.

2

Select the Initiative(s)

Select the initiative(s) that address the root causes of the identified core need(s).

3

Create a Logic Model

Outline the resources, implementation requirements, and intended outcomes of the initiative using a logic model.

4

Measure ROI

Use the ROI Framework to measure educational return on investment as part of the continuous improvement process.

5

Make Decisions

Evaluate resource use to ensure that resources are aligned to strategic vision and goals and make decisions about programs that may need to be cut or scaled.

Focus for Today

Create a Logic Model

Outline the resources, implementation requirements, and intended outcomes of the initiative using a logic model.

Measure ROI

Use the ROI Framework to measure educational return on investment as part of the continuous improvement process.

4 Steps for Logic Models and ROI

Outline the Inputs and Outputs

Begin by defining the program's inputs and outputs.

Describe the Outcomes

Define the short-and mid-term outcomes of the program/intervention.

Create a Data Collection Plan

Outline a plan for collecting the needed data to evaluate progress towards intended outcomes.

Measure ROI

Use the ROI Framework to measure educational return on investment as part of the continuous improvement process.

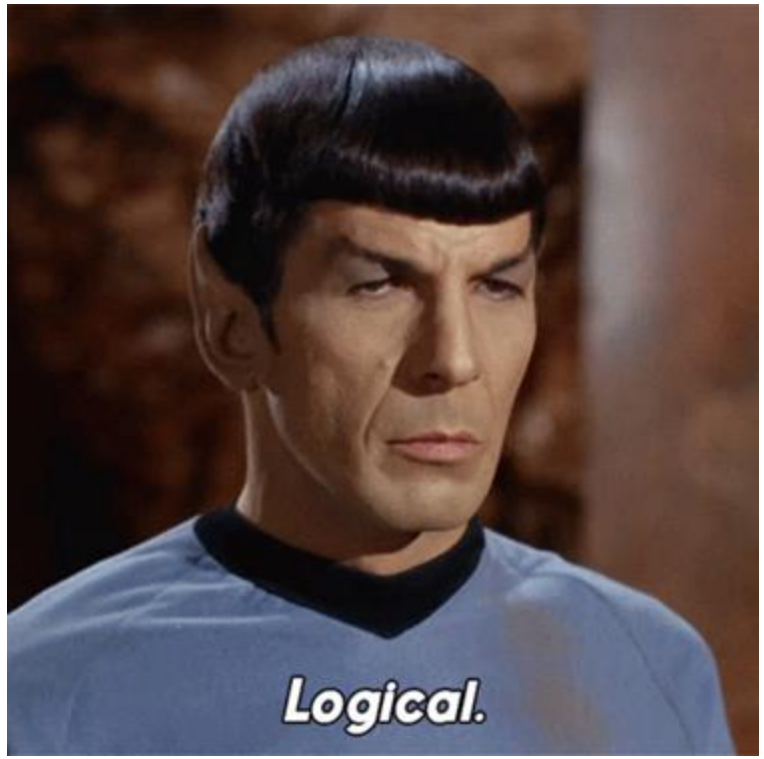
Logic Models for Continuous Improvement

What's a Logic Model?

- *A logic model is a visual representation of the theory of action that underlines the structure of an education program (Kekahio, et al., 2014).*

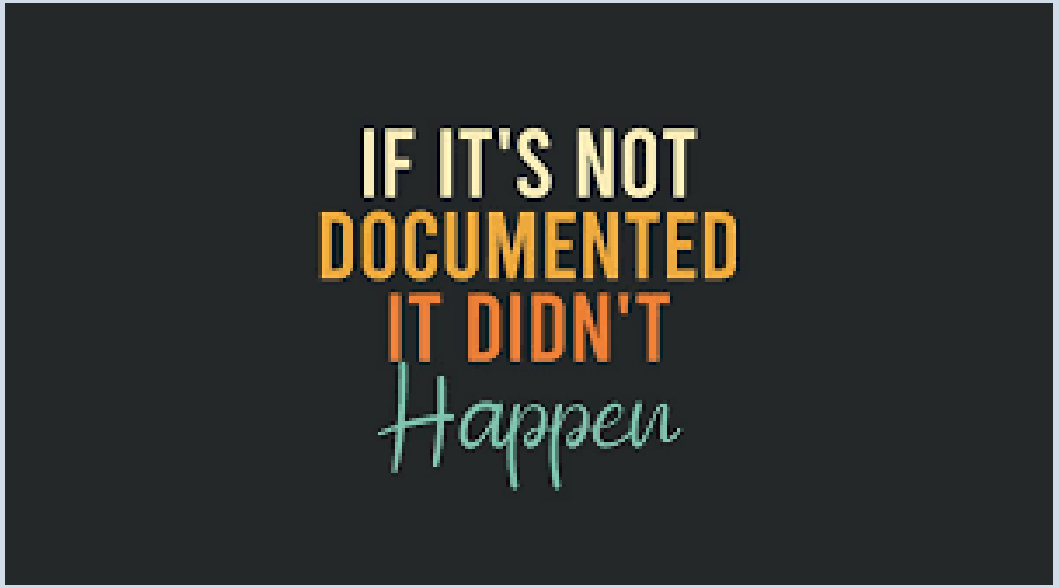
- Logic models connect a program's implementation and resources to the intended outcomes.
  - **Program**= strategy for classroom instruction, schoolwide intervention, districtwide intervention, implementation of new curriculum or technology, etc.

- Logic models help lay out a written plan for implementation, monitoring, and evaluation



Why Logic Models for Everyday Use?

- Consistency
- Accountability
- Communication
- Documentation



Logic Model Explainer and Template

Logic Models… Chart your Path to the Finish!

Inputs (Implementation Guidelines)	Outputs (Results of implementation activities)	Short-term Outcomes (STO)	Mid-term Outcomes (MTO)	Available Data
Intervention Nam	Output 1			
Descriptor 5				

The inputs describe the requirements for th intervention, progra curriculum. For example, include descriptors su frequency, and d

The outputs are the direct, measurable results of the implementation activities listed in the inputs column such as number of participants using the EdTech tool or the number of hours a teacher spends utilizing a new curriculum.

The outcomes columns should describe the expected results from the intervention, program, tool, or curriculum

This column should include a list of data available to measure the progress towards outcomes

When Should I use a Logic Model?

- **New program or initiative**
  - Including tech-based programs and classroom based interventions
- **Grants**
  - Outline grant outcomes and breakdown separate grant components into different logic models
- **Contracts with Vendors**
  - Co-design a logic model with vendors for products designed to improve teaching and learning
- **Most Costly Programs**
  - Utilize the logic model and ROI template to evaluate the cost effectiveness of high-cost programs

Example

This is the example you will use to model the process

Step 4: Return on Investment (ROI): Quantifying Logic Models for Continuous Improvement

Return On Investments – Quantifying Logic Models

Traditional ROI Formula:
Profit/Investment*100 = ROI

Investment: $100,000 + $50,000 = $150,000

Profit: $300,000 Sold – $150,000 = $150,000

ROI = 100%

Step 4. Measure ROI Over Time for Continuous Improvement

ROI for Continuous Improvement Decisions - *New!*

- ROI over time, cadence of review dependent on data availability.
- Based on your data collection plan, you will determine when you will first sit down as a team to review outputs and STO data.
- You will apply this to the ROI framework rating yourselves on implementation and outcomes.

Determine Return on Investment for Continuous Improvement

- Using ROI calculations over time to support continuous improvement
- Compares ROI only to a specific program/product at regular intervals

Traditional ROI Formula: Profit/Investment = ROI

ST = Short Term Outcomes; IF = Implementation Fidelity; MT = Mid Term Outcomes

$$\frac{(ST * IF) + (MT * IF) * (\text{Number of Students} * \text{Special Populations Multiplier})}{\text{Total Cost}} \times 100 = ROI$$

Determine Return on Investment for Continuous Improvement

1. Pre-Work: Determine Scope and Data Sources
    a. Determine which sets of products/programs will be examined. Once you select your interventions for analysis, gather the following information for each. Input them in the header row of the ROI tool.

Total Expenditures (projected or actual)	Number of Students Impacted	Intended Outcomes Implementation Measures

Determine Return on Investment for Continuous Improvement

2. Enter Investment Information and Continuous Improvement Cycle Review Dates on the planning tab of the ROI Tool

Investment Name	Continuous Improvement Check In Cadence	Total Spent	Number of Students Served	Special Student Population
Expected Implementation and Outcome Variables	#students eligible		500	
ReadingLeader	September 1, 2024	$10,000.00	250	No

Determine Return on Investment for Continuous Improvement

3. At each review interval, determine intended outcomes and observed outcome levels for both short term and mid term outcomes

Example Outcome Ranges:

High Outcomes = 80%-100%

Middle Outcomes = 50%-79%

Low Outcomes = 0%-49%

Short Term Outcomes	Progress Towards Short Term Outcomes	Mid Term Outcomes	Progress Towards Mid Term Outcomes
70% improvement in reading fluency scores 50% of students report an enhanced motivation to read		25% of students exceed growth for grade level reading expectations 50% of students report development of Independent reading habits 15% Increase in targeted interventions provided based on analytics	
10% improvement in reading fluency scores on benchmark assessment. 25% of students report reading engagement and enjoyment.	N/A	N/A	N/A

Determine Return on Investment for Continuous Improvement

4. At each review interval, determine program/initiative implementation fidelity

Example IF Ranges:

High IF = 80%-100%

Middle IF= 50%-79%

Low IF = 0%-49%

J	K
Implementation Fidelity Details	**Implementation Fidelity**
# ELA and instructional leadership staff trained (100%) # students using tool (95%) # eligible students % of teachers following usage guidelines (95%) # data review sessions (weekly)	
400 Students using product Time spent on reading program = 15 mins 80% of relevant staff completed initial training. 70% of students use ReadingLeader daily during reading periods. Bimonthly data review sessions conducted by teachers.	Low

Determine Return on Investment for Continuous Improvement

5. ROI Calculated + Team Discussion
    a. Larger ROIs indicate more return on investment
    b. Compare ROIs over time
    c. Review data points to determine action steps to increase ROI

Investment Name	Continuous Improvement Check In Cadence	Total Spent	Number of students served	Cost per participating student	Fidelity (H=1, M=.75, L=.5)	Progress Towards Short Term Outcomes (H =100, M=50, L=0)	Progress Towards Mid Term Outcomes (H =100, M=50, L=0)	Special Populations Multiplier	ROI
Ed-tech Literacy Tool	September 1, 2024	$7,000.00	700	$10.00	1	50	FALSE	1.00	500.00
Ed-tech Literacy Tool	November 1, 2024	$7,000.00	700	$10.00	1	50	FALSE	1.00	500.00
Ed-tech Literacy Tool	February 1, 2025	$7,000.00	700	$10.00	1	100	FALSE	1.00	1,000.00
Ed-tech Literacy Tool	July 1, 2025	$7,000.00	700	$10.00	1	100	100.00	1.00	2,000.00

Step 5. Improve and Scale

Based on the ROI calculations, you can see changes in ROI over time.

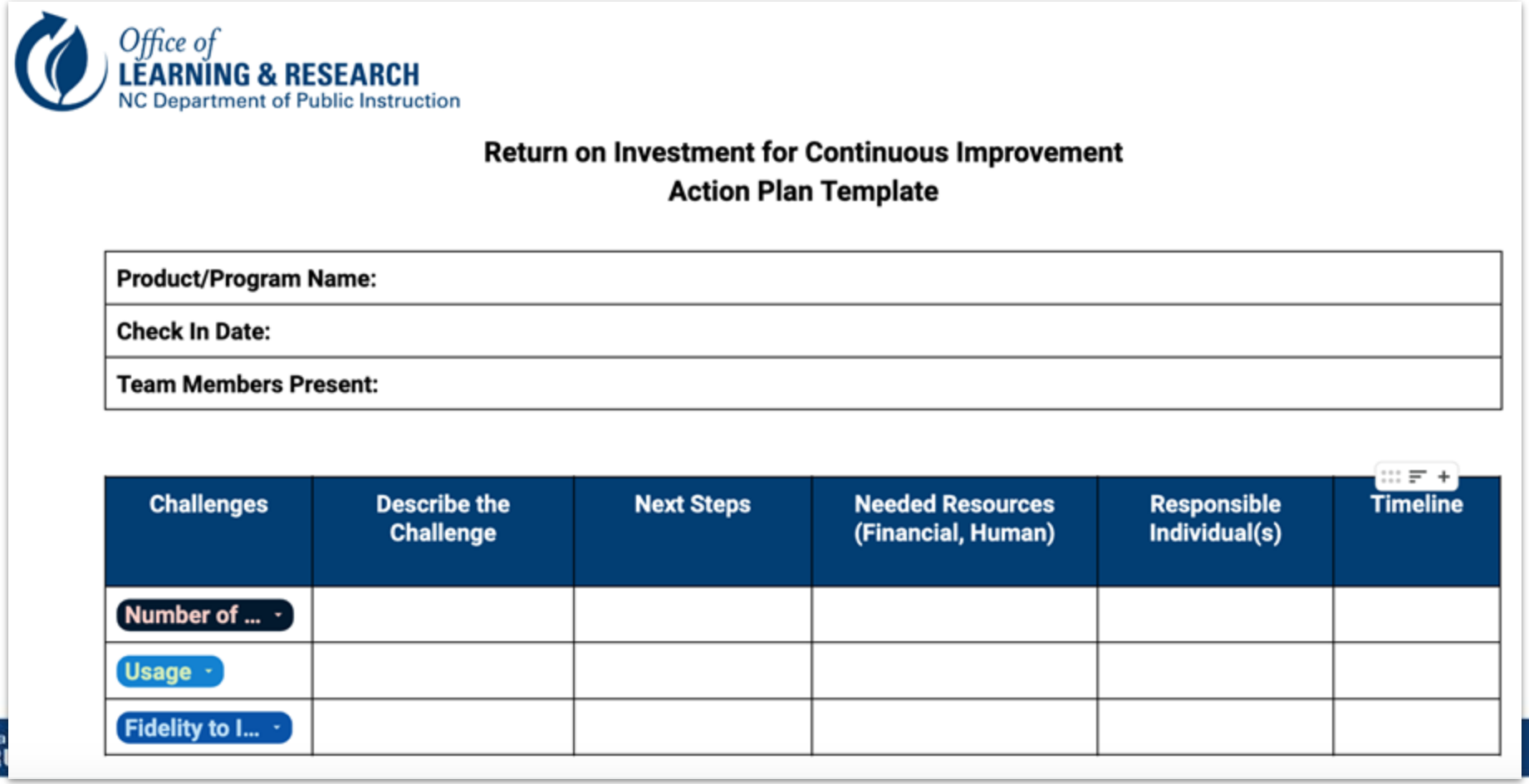
This data will facilitate a discussion about why the ROI is remaining steady, moving up, or down.

Elements to consider:

- Implementation measures?
- Outputs?
- Usage?
- Number of students using the program?

Determine Return on Investment for Continuous Improvement

5. ROI Calculated + Team Discussion
    a. Review elements of the ROI formula to develop action plan



Office of LEARNING & RESEARCH
NC Department of Public Instruction

Return on Investment for Continuous Improvement
Action Plan Template

Product/Program Name:	
Check In Date:	
Team Members Present:	

Challenges	Describe the Challenge	Next Steps	Needed Resources (Financial, Human)	Responsible Individual(s)	Timeline
Number of ...					
Usage					
Fidelity to I...					

Completed Example

EXAMPLE

EXAMPLE - ROI for Continuous Improvement Tool

Reminders: Using this Process

This process is not meant to be used to evaluate every single initiative or program a district is implementing. It is best to start small with 1-2 initiatives or programs that the district is interested in evaluating.

It is suggested to start with high-cost initiatives, new initiatives, or tech based programs as you “get your feet wet” with this process.

Suggested Uses of the ROI Tool for Continuous Improvement

- ❑ **School Level**
  - ❑ Title 1 funded initiatives
  - ❑ TSI/CSI supports
  - ❑ Classroom instructional strategies
    - ❑ Provides consistency and accountability with teachers
    - ❑ ICs or principals can break down larger district initiatives into logic models for teachers, ICs, etc
    - ❑ Logic Models for Classroom use example
  - ❑ New tool/intervention purchase
  - ❑ School improvement planning

Checklist [For Reference]

- ❑ Outline implementation requirements (inputs) and program outputs based on evidence and research
- ❑ Outline expected short- and mid-term outcomes in collaboration with the leadership team
- ❑ Create a data collection plan using the data collection plan matrix and establish needed data collection and review processes in accordance with the data collection plan
- ❑ Measure ROI at the intervals defined using the data collection plan
- ❑ Discuss improvements and monitoring protocols to implement or change based on ROI discussion
- ❑ Utilize the action plan template to formally document planned improvements

Questions for Reflection

- What ways could you see this process being useful in your district?
- Are there any other Administrators in your district that you think might be interested in receiving this training?
- Is there anything we need to change to make this more useful and easy to use?
- Other questions or thoughts?

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Questions?

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