



# EMBEDDING Evaluation



## KICKOFF INSTITUTE WORKBOOK

Colorado Cohort 2021-2022

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# Your goals for participating in Embedding Evaluation:

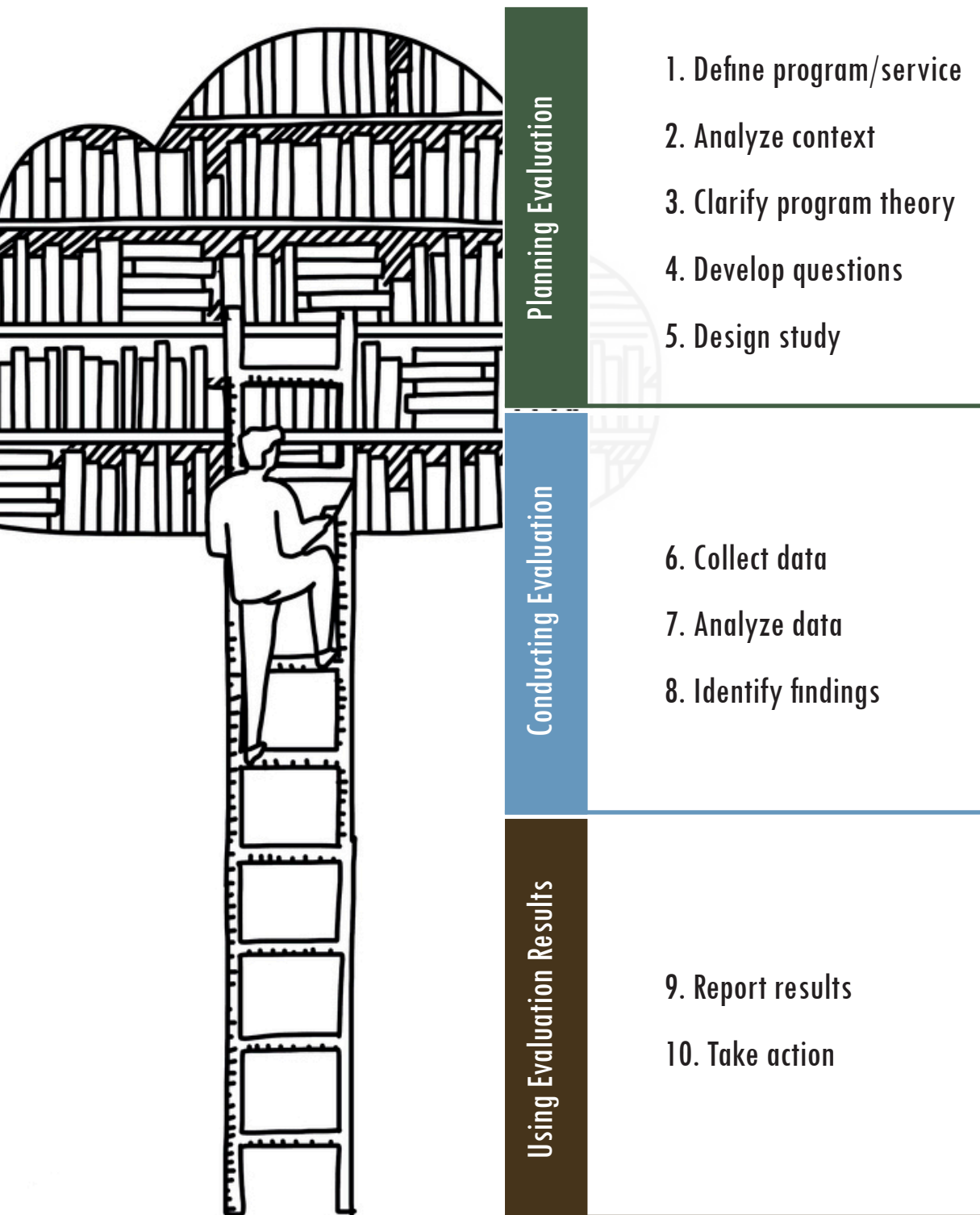
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3



# THE EVALUATION PROCESS



You will use the charts on the following pages to work through the steps of the evaluation process for the Emerson Community Library case study (described on pp. 14-16) and your evaluation project.

# Step 1:

## Define the program/service

### What is the program/service?

- ☐ What parts of the program/service are you going to evaluate?
- ☐ What portion of the population will be included in the evaluation?

### What are the goals of the program/ service?

- ☐ What are the priorities or aims of the program or service?

### How is the program/service positioned in the library?

- ☐ What is the history of the program/service?
- ☐ How is it funded?  
Is the funding stable?
- ☐ Who are the key players in terms of staff and volunteers?
- ☐ What are the attitudes of the key players toward the program/service?

Emerson Community Library

Your Library

# Step 2:

## Analyze context

### What is the purpose(s) and desired use(s) of the evaluation?

- ☐ Accountability and oversight requirements
- ☐ Program improvements
- ☐ Advocacy

### Who are the stakeholders? What is their “stake”?

- ☐ Who are the program stakeholders? What is their “stake”?
- ☐ Who are the evaluation stakeholders? What is their “stake”?
  - Evaluator(s)
  - Primary users of findings
  - Program/service participants and staff
  - Audiences for reporting

### What is the political context?

- ☐ Who will be concerned about the evaluation?
- ☐ Who might benefit from positive or negative findings?

Emerson Community Library

Your Library

# Step 3:

## Clarify program theory

What research/evaluation  
has already been conducted  
about the topics

Emerson Community Library

Your Library

What are the team's  
ideas about how the program  
works?

- ☐ Ideas about how and why a program or service will work to accomplish its goals

What are the components  
of the logic model?

# Step 4:

## Develop questions

What does success look like for this program/service?

- ☐ Outcomes-related definitions of success are rarely sufficient (by themselves)
- ☐ Consider a multi-faceted picture of success

What are the evaluation questions?

- ☐ Overarching guiding questions that the evaluation seeks to answer

Emerson Community Library

Your Library



# Step 5: Design study

What is your plan for  
conducting the evaluation  
(steps 6-8)?

Emerson Community Library

Your Library

What is your plan for  
using the evaluation  
results (steps 9-10)?

# Step 6:

## Collect data

What data collection methods will you use to answer the evaluation questions?

- ☐ Types of data needed to answer your evaluation questions
- ☐ Strengths and limitations of methods
- ☐ Organizational resources and expertise

What steps will you take to collect relevant, credible data?

- ☐ Are your methods sufficient for yielding relevant, credible data?
- ☐ How will you define your samples?
- ☐ Who will collect the data?

Emerson Community Library

Your Library

# Step 7: Analyze data

How will you analyze the data?

Emerson Community Library	Your Library

# Step 8: Identify Findings

What are your steps to integrate and interpret the findings and draw conclusions?

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# Step 9:

## Report results

### What are your strategies for reporting findings to various audiences?

- ☐ Who are your stakeholders? (Identified in step 2)
- ☐ What messages will resonate with each stakeholder?
- ☐ How should the messages be delivered?
- ☐ What recommendations will you make to each stakeholder?

Emerson Community Library

Your Library

# Step 10:

## Take Action

### How will you use your findings?

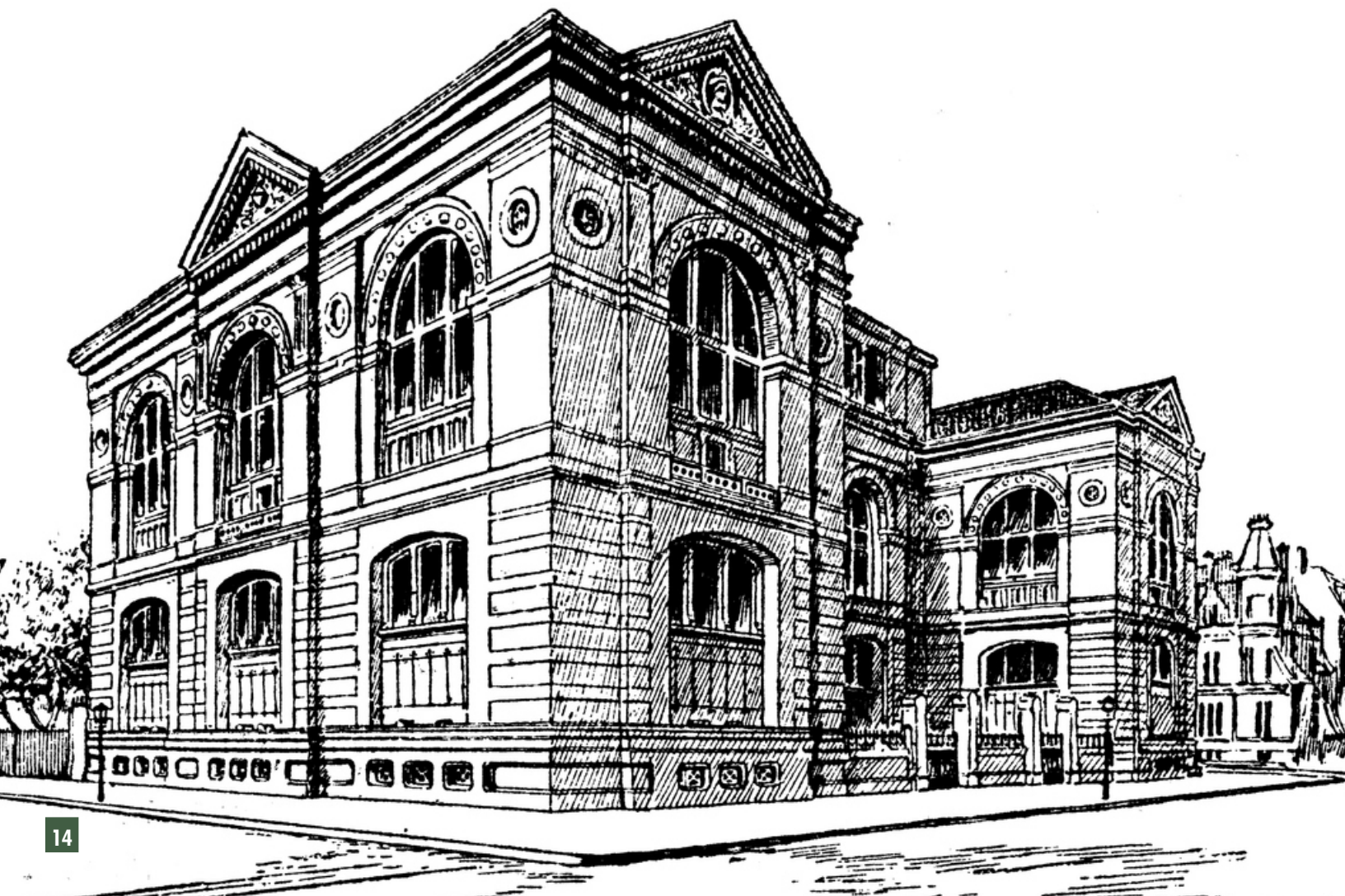
- ☐ Revisit the purpose of the evaluation, established in step 2, and use this to determine how you will use the findings (e.g., program improvement, decision-making, advocacy, etc.).

## Notes and reflections...

# Case Study Overview: Emerson Community Library

## Library and Community Overview

- ❑ Emerson Community Library (ECL) is a county library with a legal service area population of 110,000.
- ❑ ECL has three outlets and serves multiple communities across the county, which vary in levels of income and library use.
- ❑ Community concerns include STEM education, particularly elementary school math performance.
- ❑ Low-income families, such as those served by Head Start, are a population the library has historically underserved.
- ❑ There are 20 Head Start centers in the county which serve children ages birth to five.





## **Program**

ECL offers a variety of STEM storytimes both in and outside of the library to various age groups, including an outreach program that brings a math-focused 8-session storytime series to the Head Start centers across their county: Infusing Math into Preschool Services. This program was launched a year ago and is funded by operating funds and a starter grant from a local corporate foundation. The starter grant provides 18 months of funding.

## **Location**

The “Infusing Math into Preschool Services” storytime series is offered at ten Head Start centers that are located in the three communities with the lowest levels of library use within the county. The main library is located about 20 miles from these communities.

## **Key Staff/Volunteers**

The children’s librarian at the main library is in charge of the “Infusing Math into Preschool Services” storytime series. She developed and tested the content, and recruited, trained, and supervises a team of five volunteers.

The five volunteers are based in the main library and work in pairs to deliver the math storytime series at the Head Start centers.

The evaluation team consists of the children’s librarian and the assistant library director.

## **Program Goals**

The program is based on the idea that early engagement with math concepts and activities lays the groundwork for success in elementary school math. Its overarching aim is to support a school district initiative focused on boosting elementary school math performance.

The primary goal is to engage 3 to 5-year-olds in math concepts and activities. A secondary goal is to help Head Start teachers understand the importance of early math engagement, learn how they can support early math engagement with math concepts and activities, and incorporate math concepts and activities in their work.



# Case Study Overview: Emerson Community Library

## Staff and volunteer attitudes

### library director



Eager to support a school district initiative focused on boosting elementary school math performance.

### assistant library director



Concerned STEM is a trendy topic rather than the core mission of library youth services.

### children's librarian



Excited to integrate reading and STEM, and serve Head Start centers.

### teen librarian



Disappointed operating funds weren't allocated to making-related teen programming in the same three focal communities.

### volunteers



Love the library and are eager to give back.

Some don't like math.

# Step 1: Define program/service

## Emerson Community Library

### What is the program/service?

What parts of the program/service are you going to evaluate?

What portion of the population will be included in the evaluation?

### What are the goals of the program/ service?

What are the priorities or aims of the program or service?

### How is the program/service positioned in the library?

What is the history of the program/service?

How is it funded?  
Is the funding stable?

Who are the key players in terms of staff and volunteers?

What are the attitudes of the key players toward the program/service?

# Step 1: Define program/service Your Library

What parts of the  
program/service are you  
going to evaluate?

What portion of the  
population will be included  
in the evaluation?

## What are the goals of the program/ service?

What are the priorities  
or aims of the program  
or service?

## How is the program/service positioned in the library?

What is the history of the  
program/service?

How is it funded?  
Is the funding stable?

Who are the key players in  
terms of staff and volunteers?

What are the attitudes of  
the key players toward the  
program/service?

# STEP 2: ANALYZE CONEXT

## Purpose and Use

The evaluation team identifies multiple aims for the evaluation of the library's math-focused storytimes. Review the varying purposes and uses that library staff envision.

### Program Improvement

The children's librarian sees the purpose of the evaluation as providing data to help improve the program.

She wants to use the evaluation findings to maximize benefits for the focal children and teachers by refining the content, volunteer training, and overall focus/approach.

She also hopes to use the findings to expand the project to other children and teachers by identifying best practices to build on.

### Accountability and Oversight

The library director sees the purpose of the evaluation as satisfying accountability and oversight requirements.

She wants to use the evaluation findings to meet reporting requirements of the corporate foundation that is providing funding.

She also hopes to use the findings to report to the library board about how operating funds were expended and what difference the investment made.

### Advocacy

The library director sees the purpose of the evaluation as providing data for advocacy activities.

She wants to use the evaluation findings to demonstrate the library's success in supporting STEM learning in early childhood.

She also hopes to use the findings to build positive public opinion about the library.

In addition, she hopes to use the evaluation findings to secure county funding that has been earmarked for programs that boost elementary school math performance.

# ECL: Stakeholders and their “stakes”

The evaluation team identifies 10 stakeholder groups. Review the stakeholders and their “stake” in the evaluation.

Stakeholder	Their “stake”
Children’s librarian	Evaluator Primary user of findings Source of framing information
Assistant library director	Evaluator Primary user of findings Source of framing information
Library director	Primary user of findings Source of framing information
Teen librarian	Primary user of findings Source of framing information
Volunteers	Audience for reporting
Corporate foundation	Audience for reporting
Library board	Audience for reporting
Head Start families	Audience for reporting
Head Start teachers	Audience for reporting
Head Start administrators	Audience for reporting



# ECL: Planning the evaluation

**Key Considerations:** Who will be concerned about the evaluation? Who might benefit from positive or negative findings? What is the political context?

## Benefit from positive findings

The library director would be able to report success to funders, build public support and secure funding going forward.

The children's librarian and volunteers would receive validation of their work.

The Head Start teachers would continue to receive story times.

The corporate foundation and library board would view their investments as beneficial.

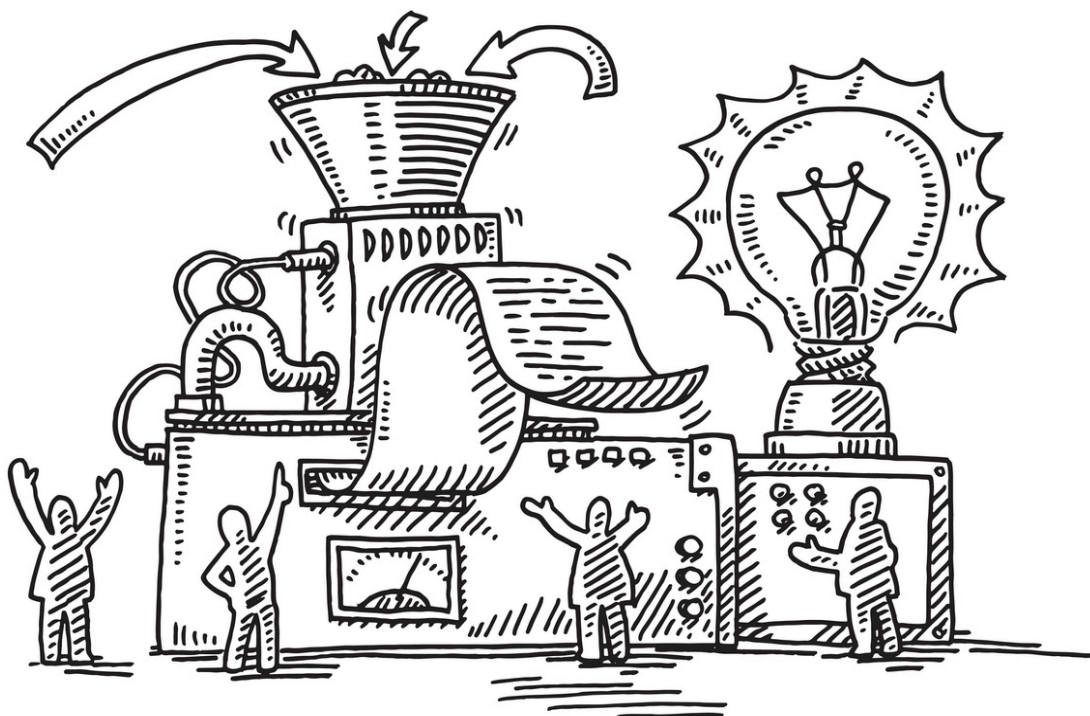
## Benefit from negative findings

The assistant director and teen librarian could “benefit” from negative findings because funding might be re-directed to other programs/services.

## Concerned about the evaluation

The children's librarian and volunteers may feel their work is being scrutinized.

The Head Start teachers may worry the story times will be stopped.



# Your Library: Purposes and desired use

Identify the purposes and desired use for your evaluation.

**Purposes**

**Desired use**

# Your Library: Planning the evaluation

**Key Considerations:** Who will be concerned about the evaluation? Who might benefit from positive or negative findings? What is the political context?

**Benefit from positive findings**

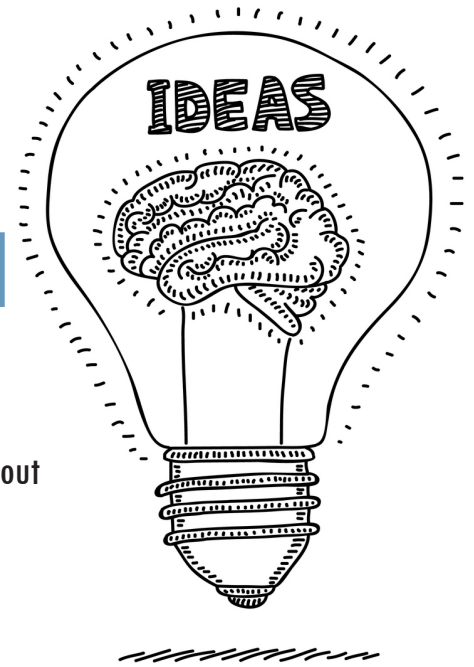
**Benefit from negative findings**

**Concerned about the evaluation**

## Notes and reflections...

## STEP 3: CLARIFY PROGRAM THEORY

### ECL: Literature review and ideas about how the program works



The evaluation team conducts a literature review and discusses their ideas about how the math storytimes are envisioned to work.

#### Ideas about how and why the program will accomplish its goals

- Children's librarian finds articles that argue early math engagement will prepare young people for success in elementary school math—but no research on the topic.
- Children's librarian finds articles that provide evidence that positive attitudes about math among preschool teachers is associated with positive attitudes about math among their students.
- Children's librarian has seen the influence of other library story times offered at early childhood education centers in helping teachers see the importance of early literacy.
- Assistant library director believes that exposing Head Start teachers to math concepts and activities can lead to them incorporating those ideas into their own teaching.

# ECL Logic Model Attempt #1

## Components

The library and school district provide funding.

The children's librarian developed the math storytime content.

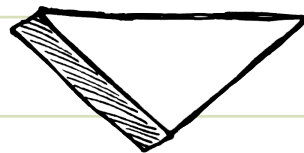
80 math storytime sessions are delivered in 10 Head Start centers.

200 children (ages 3-5) attend the sessions.

Community members volunteer their time.

The children's librarian train the volunteers.

10 Head Start teachers attend the sessions.



## Inputs

Library and school district funding

Community volunteers

Math storytime curriculum

Volunteer training



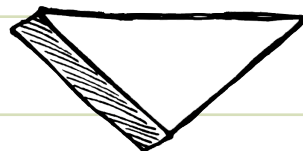
## Outputs

80 math storytime sessions are delivered in 10 Head Start centers

200 children (ages 3-5) and 10 Head Start teachers attend



## Outcomes



IF the library and school district dedicate funds, community members volunteer their time, the children's librarian develops math storytime content, and the children's librarian trains the volunteers...

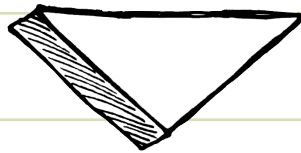
THEN volunteers will deliver 80 math storytime sessions in 10 Head Start centers with 200 children (ages 3-5) and 10 Head Start teachers in attendance.



# ECL Logic Model Attempt #2

## Component that is added

Participating children perform better on math assessments in elementary school.



### Inputs

Library and school district funding

Community volunteers

Math storytime curriculum

Volunteer training



### Outputs

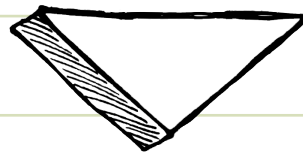
80 math storytime sessions are delivered in 10 Head Start centers

200 children (ages 3-5) and 10 Head Start teachers attend



### Outcomes

Children perform better on math assessments in elementary school



IF the library and school district dedicate funds, community members volunteer their time, the children's librarian develops math storytime content, and the children's librarian trains the volunteers...

THEN volunteers will deliver 80 math storytime sessions in 10 Head Start centers with 200 children (ages 3-5) and 10 Head Start teachers in attendance.

And THEN participating children will perform better on math assessments in elementary school.

# ECL Logic Model Attempt #3

## Components that are added

Participating children will demonstrate basic math skills (counting, sorting, matching) during storytime sessions.

Participating children will demonstrate basic math skills (counting, sorting, matching) at home.

Head Start teachers will incorporate math concepts

and activities in their work.

Head Start teachers will deepen their understanding of the importance of early math engagement and how they can support it.

## Component that is removed

Participating children perform better on math assessments in elementary school.

## Inputs

Library and school district funding

Community volunteers

Math storytime curriculum

Volunteer training

## Outputs

80 math storytime sessions are delivered in 10 Head Start centers

200 children (ages 3-5) and 10 Head Start teachers attend

## Outcomes

Children perform better on math assessments in elementary school

Teachers deepen their understanding of the importance of early math engagement and how they can support it

Teachers incorporate math concepts and activities in their work

IF the library and school district dedicate funds, community members volunteer their time, the children's librarian develops math storytime content, and the children's librarian trains the volunteers...

THEN volunteers will deliver 80 math storytime sessions in 10 Head Start centers with 200 children (ages 3-5) and 10 Head Start teachers in attendance.

And THEN participating children will demonstrate basic math skills (counting, sorting, matching) during storytime sessions and at home, Head Start teachers will deepen their understanding of the importance of early math engagement and how they can support it, and Head Start teachers will incorporate math concepts and activities in their work.

# Your Library Logic Model

Library Name/Evaluation Project Title:

Inputs	Outputs	Outcomes
What resources are needed to deliver those programs or services?	What programs or services are delivered to effect that change? In what amount? How many people participate?	What is the change that participants are expected to experience? (Knowledge, Skill, Attitude, Behavior, Condition, Life status)

If/Then/Then Statement:

# STEP 4: DEVELOP QUESTIONS

## ECL: Develop questions

The evaluation team drafts a list of potential evaluation questions, which includes some strong questions and some that need improvement:

### Possible evaluation questions:

- To what extent do project volunteers implement the math storytimes as designed?
- Are the math storytimes better quality than the library's science storytimes?
- What do children like about the math storytimes?
- What content is covered in the math storytimes?
- In what ways do participating children demonstrate engagement and interest during storytime sessions?
- To what extent do participating children demonstrate basic math skills (counting, sorting, matching) during storytime sessions?
- To what extent do the math storytimes increase 3rd grade math assessment scores among participating children?
- To what extent do participating children demonstrate basic math skills (counting, sorting, matching) at home?



# Characteristics of Evaluation

We have identified four characteristics of effective evaluation in libraries. Review the characteristics with your team. How do these inform your thinking about the evaluation questions for your project?

## Specific program/service

Evaluation focuses on carefully selected programs/services, which allows us to investigate the selected programs/services in greater depth.

We don't attempt to evaluate everything the library offers, and evaluation studies have a clear beginning and end point. This distinguishes evaluation from monitoring, which involves gathering and analyzing data about a variety of programs/services on a continual basis.

There is no recipe or formula that can be applied uniformly for every evaluation; instead, an evaluation is designed to address a specific program/service.

## Multiple dimensions of success

One key dimension of success focuses on whether a program or service is effective in achieving its desired outcomes.

Examining the desired outcomes for a program/service is a central part of many evaluations but is rarely sufficient to fully evaluate a program/service.

We need to look additional dimensions of success in addition to whether a program is effective, which might include:

- The quality of program/service design and implementation
- Relevance to community needs and interests
- Level of use
- Cost effectiveness
- Sustainability over time
- Equity in terms of access, experiences, and outcomes

## Action-oriented

Evaluation is intended to help libraries take action by improving a program/service, satisfying accountability or oversight requirements, or working to secure additional funding and advocate for library services.

We do not conduct an evaluation for its own sake or because it would “nice to know”

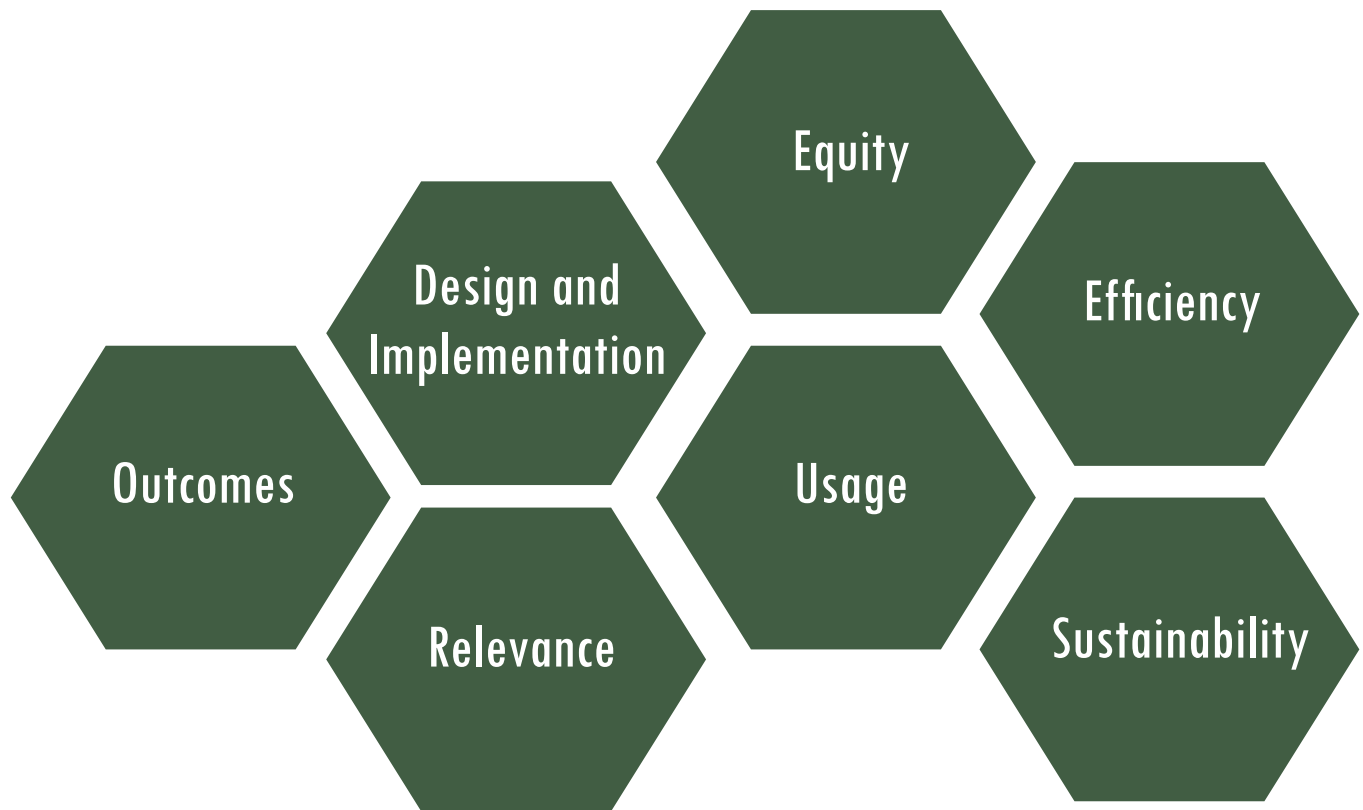
## Community-focused

Evaluation seeks to understand patrons' or other community members' perspectives on a library program or service, which requires us to gather and analyze data from the community.

Rather than seeking to answer these questions from a library-focused perspective using library data, evaluation requires libraries to gather data from individuals or organizations outside of the library.

# Dimensions of Success

Consider the dimensions of success when evaluating library programs and services: outcomes, design and implementation, relevance, equity, usage, efficiency, and sustainability. How will your team define success for your evaluation?





# Your Library: Develop evaluation questions

I Define success for your program or service. Draft 3-5 evaluation questions.

What does success look like?

Evaluation Questions

## STEPS 5 & 6: DESIGN STUDY AND COLLECT DATA

### ECL: Choose data collection methods

The evaluation team meets to choose their data collection methods. What methods will you use to evaluate the math storytimes? After establishing these, determine whether your methods are sufficient, and identify your sample(s) and data collectors.

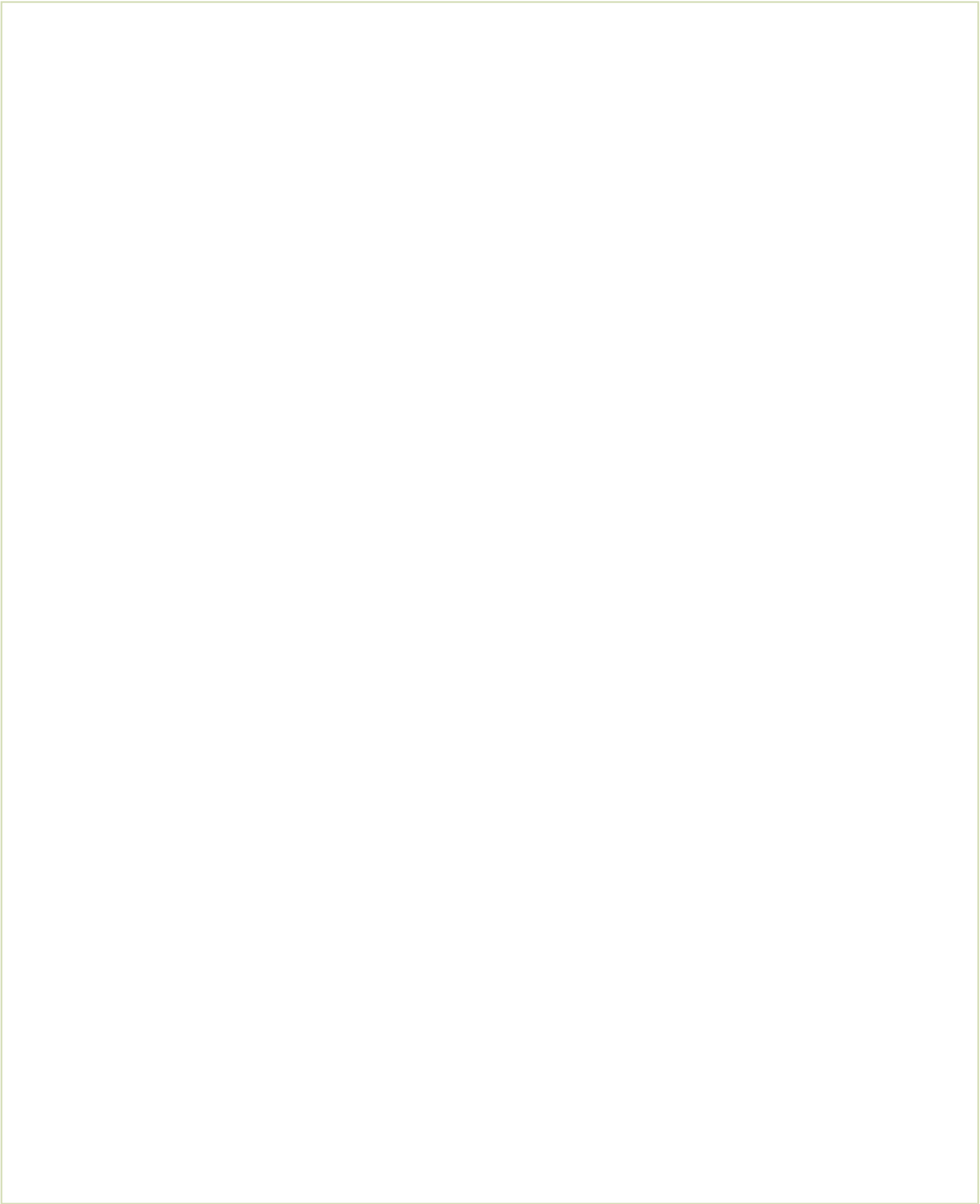
Evaluation Questions	Data Collection Methods			
	Method 1:	Method 2:	Method 3:	Method 4:
To what extent do volunteers implement math storytimes as designed?				
In what ways do participating children demonstrate engagement and interest in math storytime sessions?				
To what extent do participating children demonstrate basic math skills (counting, sorting, matching) (a) during math storytime sessions and (b) at home?				

# Your Library: Choose data collection methods

What methods will you use to evaluate your project? After establishing these, determine whether your methods are sufficient, and identify your sample(s) and data collectors.

Evaluation Questions	Data Collection Methods			

## Notes and reflections...



## Notes and reflections...

# ECL: Completed Methods Grid

Evaluation Questions	Data Collection Methods			
	Observation of volunteers during a sample of math storytime sessions	Interviews with volunteers	Observation of children during a sample of math storytime sessions	Survey of children's parents and caregivers
To what extent do volunteers implement math storytimes as designed?	X	X		
In what ways do participating children demonstrate engagement and interest in math storytime sessions?			X	
To what extent do participating children demonstrate basic math skills (counting, sorting, matching) (a) during math storytime sessions and (b) at home?			X	X

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