Evaluating Professional Learning: A Workshop Series Companion to the Tool

Phase 1: Preparing for Evaluation Workshop 1A

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Evaluating Professional Learning Toolkit and related resources are available at:

https://ies.ed.gov/ncee/edlabs/regions/northeast/Our Work/Resource/7





EVALUATING PROFESSIONAL LEARNING

A TOOL FOR SCHOOLS AND DISTRICTS

This toolkit introduces practitioners involved in the management of professional learning at the school, district, regional, or state level to key concepts of professional learning evaluation. It guides users through a process for developing an evaluation plan and includes activities, tools, and other resources for monitoring professional learning initiatives. A multidisciplinary team that includes teacher leaders, professional learning managers, data managers, and other administrators can use this tool to develop a logic model, develop evaluation questions, use existing and new data to address those questions and make sense of the data. Guidance is also provided to help the team communicate findings accurately and effectively to various audiences, such as school, district, or state leaders who can impact policies and practice.

Developed by

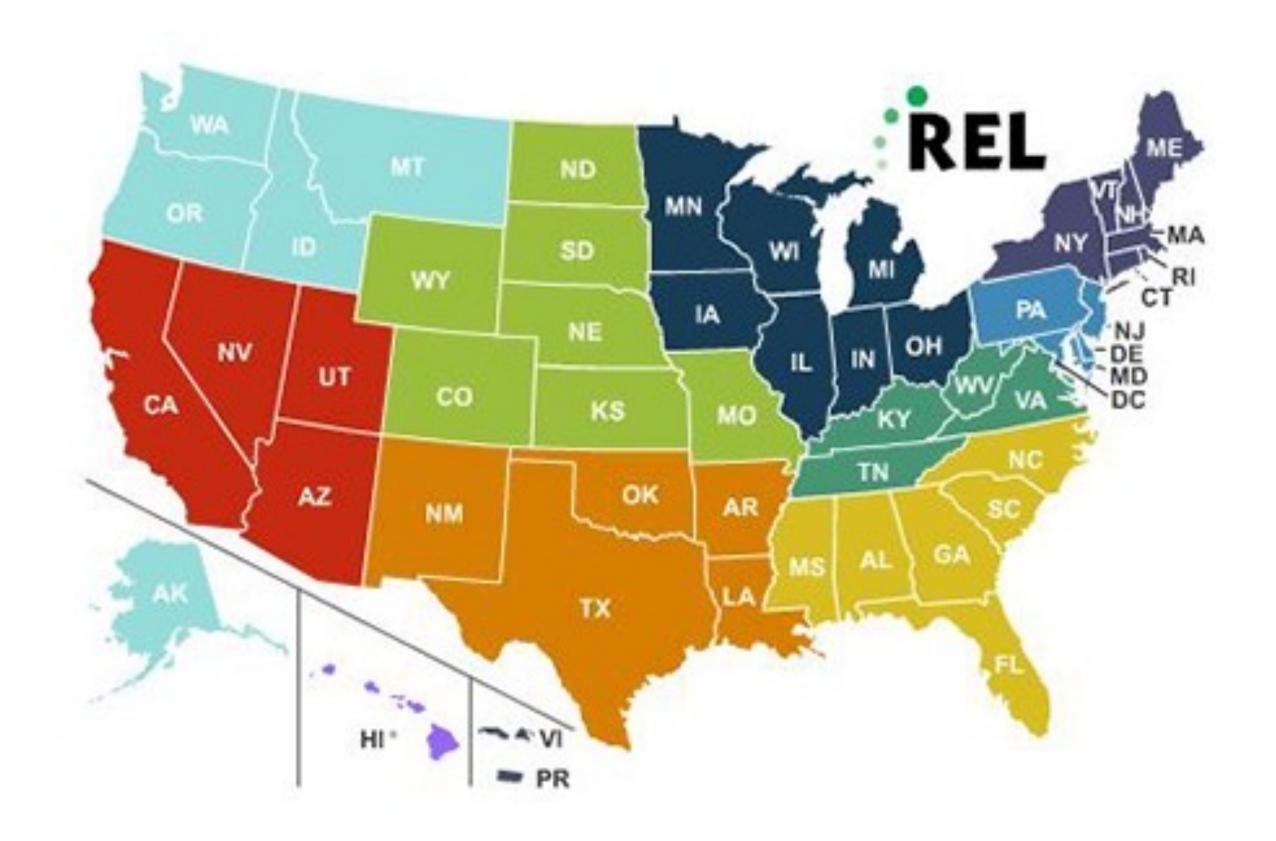
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The Regional Educational Laboratory Program

- 10 RELs nationwide
- Funded by the Institute of Education Sciences (IES) at the U.S. Department of Education



https://ies.ed.gov/ncee/edlabs/regions/northeast/Home



What we do

- Research partnerships and alliances
- Applied research
- Training, coaching, and technical support for evidence use
- Collaboration and coordination with other RELS and federally funded centers
- Dissemination and knowledge utilization
- Ask-A-REL reference desk service



Who is participating today?

Introductions:

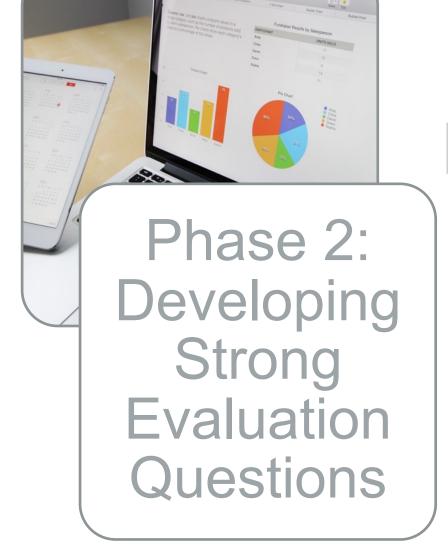
- Name
- Organization and role
- Describe prior experience you've had with evaluation
- Note what you are hoping to get out of participation in this project



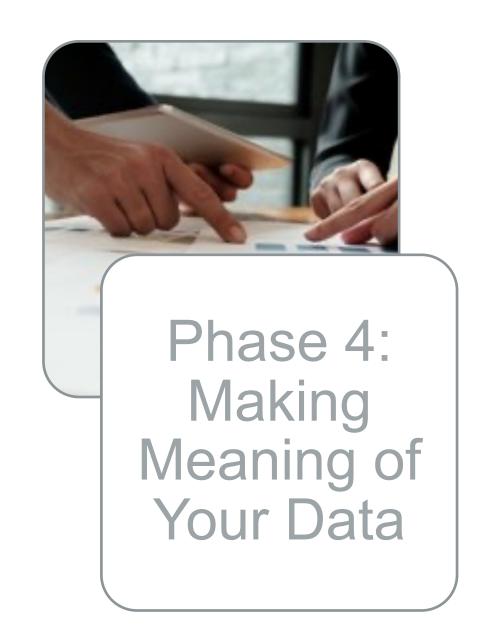
Workshop series sequence



evaluation









Workshop series sequence

Phase 1: Preparing for Evaluation

Workshop 1A: Developing a logic model Workshop 1B: Defining high quality implementation

Phase 2: Developing Evaluation Questions

Workshop 2: Developing strong evaluation questions

Phase 3: Developing a Data Collection Plan

Workshop 3A: Identifying appropriate data sources Workshop 3B: Data collection planning

Phase 4: Making Meaning of Your Data

Workshop 4A: Data analysis
Workshop 4B: Crafting/communicating your data story



Workshop series goals

Participants will:

- Build knowledge about the process for designing evaluations of professional development
- Practice connecting program objectives with measurable outcomes
- Use the logic model to develop strong evaluation questions
- Gain skills in collecting high-quality and purposeful data about their professional development initiatives
- Learn simple analysis methods to make meaning of their data
- Gain experience using tools to support the development of evaluation plans



Goals for today's workshop

Participants will:

- Be introduced to the process of planning an evaluation of professional learning and development
- Analyze the alignment of your professional development model with the characteristics of effective PD
- Learn the components of a logic model and how they apply to a shared example scenario
- Begin developing a logic model for your professional learning initiative



Today's agenda

Introduction to evaluation

Designing or selecting high-quality professional development

Elements of a logic model: Guided practice

Conclusion & next steps



Introduction to Evaluation



What is evaluation?

Evaluation

Systematic investigation about the merit, worth, or significance of a policy or program

Research

Systematic study directed toward greater knowledge or understanding of a field

Assessment

Appraisal of current status by collecting evidence, which might or might not involve formal measurement

Guskey, 2000; Mertens & Wilson, 2012



Types of evaluation

Formative Evaluations

Summative Evaluations

Needs assessments

Process

Outcome

Impact

Mertens & Wilson, 2012



Why do we conduct evaluations?

1. Reporting to external and internal agencies

Funding

Policy

2. Understanding program implementation

Improvement

Learning

Monitoring

3. Understanding program impact

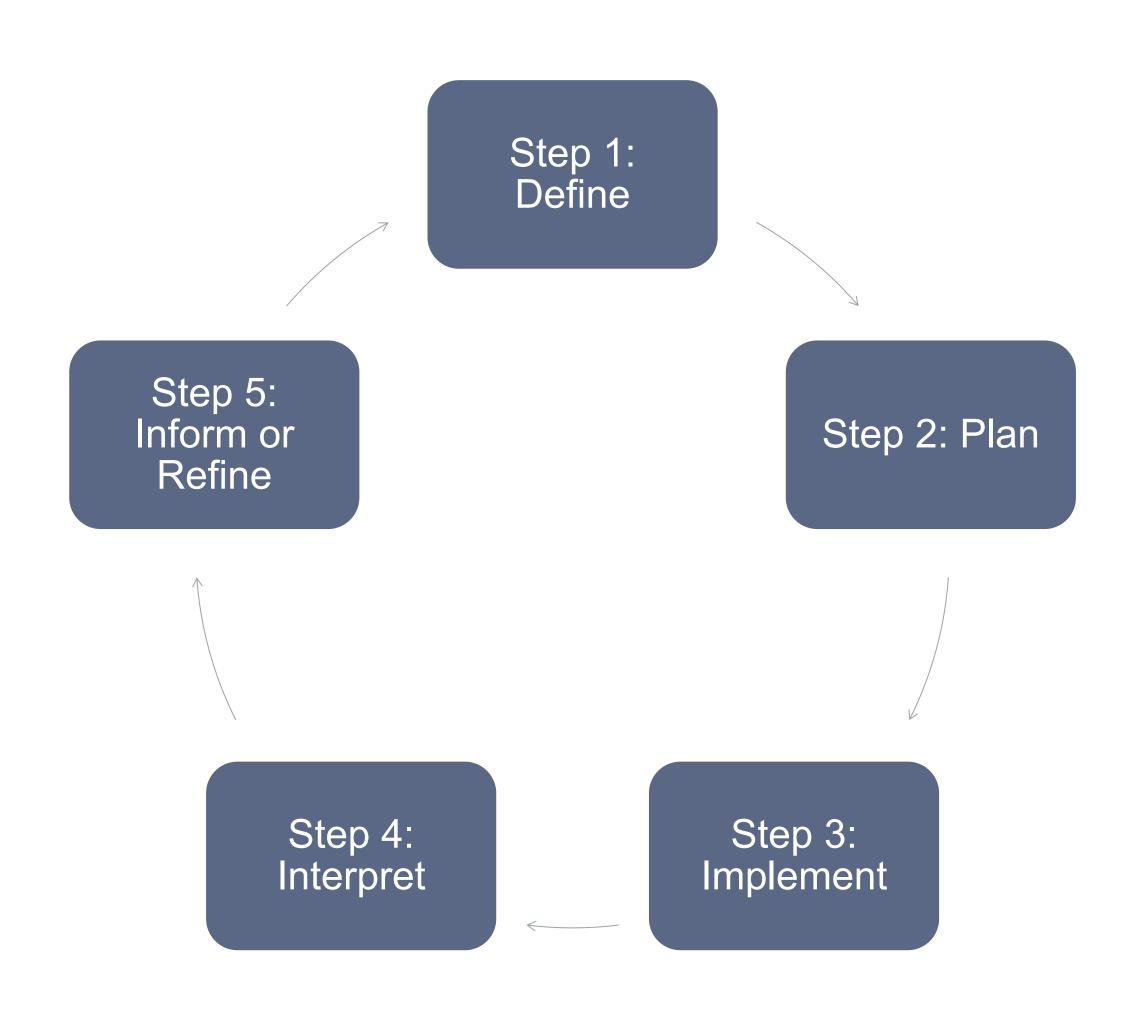
Performance

Replication or Expansion

Discontinuation



A continuous evaluation model



Step 1: Define

What is the purpose of the evaluation and the underlying logic of the program?

Step 2: Plan

What questions should the evaluation answer, and using what design?

Step 3: Implement

How should data be collected and analyzed?

Step 4: Interpret

How should results be used and communicated?

Step 5: Inform OR Refine

What decisions can be made about the program?



	Five Critical Levels	of Professional Deve	lopment Evaluation	
Evaluation Level	What questions are addressed? (Represents a sampling of questions)	How will the information be gathered? (Represents a sampling of tools)	What is measured or assessed?	How will the information be used?
Participants' Reaction (Guskey Level 1)	Did they like it? Was their time well spent?	Questionnaires, focus groups, interviews, learning logs	Initial satisfaction with experience	To improve program design and delivery
Participants' Learning (Guskey Level 2)	Did participants acquire the intended skills and knowledge?	Simulations and demonstrations, paper-pencil activities, case study analysis, reflections	New knowledge and skill of participants	To improve program content, format, and organization
Organizational Support and Change (Guskey Level 3)	Was implementation advocated, facilitated, and supported? Was the support public and overt?	District and school records, questionnaires, structured interviews with key stakeholders	The organization's advocacy, support, accommodations, facilitation, and recognition	To document and improve organizational support and/or to inform future change efforts
Participants' Use of New Knowledge and Skill (Guskey Level 4)	Did participants effectively apply the new knowledge and skills?	Questionnaires, interviews, reflections, portfolios, direct observations, video	Degree and quality of implementation	To document and improve the implementation of the program
Student Learning Outcomes (Guskey Level 5)	What was the impact on students?	School/student records, questionnaires, interviews	Student learning outcomes: cognitive, affective, psychomotor	To focus and improve all aspects of program design, implementation and follow-up; and/or to demonstrate the overall impact of professional development

Designing or Selecting High-Quality Professional Development



Features of Effective Professional Development

High-quality professional development...

- Is content focused
- Incorporates active learning
- Supports collaboration
- Uses models of effective practice
- Provides coaching and expert support
- Offers feedback and reflection
- Is of sustained duration

(Darling-Hammond, Hyler, & Gardner, 2017)



Activity: How well do these design elements align with your professional learning initiative?

Handout 1: Designing or Select High-Quality PD



Discussion

- Based on your results, which feature was rated most highly? What evidence supports that rating?
- Based on your results, which feature was rated the lowest? What evidence supports that rating?
- Are areas where the model that need to be strengthened before implementing?



Using Logic Models in Evaluation



May 2015



Logic models for program design, implementation, and evaluation: Workshop toolkit

Karen Shakman Sheila M. Rodriguez Education Development Center, Inc.

Overview

This Logic Model Workshop Toolkit is designed to help practitioners learn the overall purpose of a logic model, the different elements of a logic model, and the appropriate steps for developing and using a logic model for program evaluation. This toolkit includes a facilitator workbook, a participant workbook, and a slide deck.





Available from:

Logic model toolkit

https://ies.ed.gov/ncee/edlabs/projects/pro
ject.asp?ProjectID=401



What is a logic model?

A logic model:

- Provides a simplified picture of the relationships between the program inputs and the desired outcomes of the program
- Is a framework for:
 - Planning
 - Implementation
 - Monitoring
 - Evaluation
- Is a graphic and explicit representation of relationships, assumptions, and rationale





What is a logic model?

• The simplest form of a logic model:

- INPUTS

STRATEGIES



OUTCOMES

- Inputs: What is invested in the program (e.g., money, people, time, and space)
- Strategies: What is done in the program (e.g., program activities)
- Outcomes: What results from the program (i.e., short- and long-term outcomes)



Elements of a logic model

Problem Statement

Resources (inputs)

Strategies & activities

Outputs

Short-term outcomes

Long-term outcomes

Impacts

Assumptions



Introduction to the professional learning scenario

Review the STEM Partnership Program Scenario

Handout 2: Professional Learning Scenario



Elements of a logic model: Problem statement

Problem statement: The problem or challenge that the program or policy is designed to address

Questions to ask in defining the problem:

- What is the problem or issue?
- Why is this a problem?
- For whom does this problem exist?
- Who has a stake in the problem?
- What is known about the problem (through previous work, research, etc.)?

Handout 3: Logic Model Template



Logic model example

Problem Statement: Students in the district do not have enough access to high-quality learning experiences in science, technology, engineering, and mathematics (STEM) as they transition from middle to high school.

Resources	Strategies and activities	Outputs	Short-term outcomes	Long-term outcomes	Impacts

Assumptions:

Elements of a logic model: Resources

Resources (inputs): The material and intangible contributions that are or could reasonably be expected to be available to address the problem

- Examples:
- Money, materials, and equipment (material/tangible)
- People, time, and partnerships (intangible)
- Resources are the inputs that enable the creation of the strategies and activities that are designed to respond to the stated problem.



Problem Statement: Students in the district do not have enough access to high-quality learning experiences in science, technology, engineering, and mathematics (STEM) as they transition from middle to high school.

Resources	Strategies and activities	Outputs	Short-term outcomes	Long-term outcomes	Impacts

- Middle & high school educators
 & students
- University facilities& staff
- Local STEM businesses
- Community partners
- Funding from NSF

Assumptions:

Elements of a logic model: Strategies and activities

Strategies and activities: What you propose to do to address the problem

Activities, services, events, and products:

- Are designed to address the problem
- Are, together, intended to lead to certain outcomes



Problem Statement: Students in the district do not have enough access to high-quality learning experiences in science, technology, engineering, and mathematics (STEM) as they transition from middle to high school. Students of color and female students tend to be under-represented in STEM fields in higher education.

Resources	Strategies and activities	Outputs	Short-term outcomes	Long-term outcomes	Impacts
 Middle & high school educators & students University facilities & staff Local STEM businesses Community partners Funding from NSF 	 Summer workshops Mentoring Professional learning communities Inquiry-based lessons STEM field trips & activities 				

Assumptions:

Elements of a logic model: Outputs

Outputs: The immediate results of the activities in the logic model. Outputs provide concrete, measureable evidence that the activity occurred.

Examples:

- Number of teachers who attended
- Number of workshops held



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 Middle & high school educators & students University facilities & staff Local STEM businesses Community partners Funding from NSF 	 Summer workshops Mentoring Professional learning communities Inquiry-based lessons STEM field trips & activities 	 # of teachers participating # of summer workshops and PLCs # of lessons created # of university mentors # of new activities # of field trips 			

Assumptions:

Elements of a logic model: Outcomes

Outcomes: What difference does it make?

Short-term

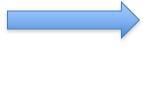
Most immediate and measurable results for participants that can be attributed to strategies and activities

Long-term

More distant, though anticipated, results of participation in strategies and activities

Impact

Desired outcomes of long-term implementation of strategies and activities, dependent on conditions beyond the scope of the program





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• # of new

activities

• # of field trips

& activities

Assumptions:

Funding from NSF

Problem Statement: Students in the district do not have enough access to high-quality learning experiences in science, technology, engineering, and mathematics (STEM) as they transition from middle to high school. Students of color and female students tend to be under-represented in STEM fields in higher education.

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Assumptions:

Elements of a logic model: Assumptions

Assumptions: Beliefs about participants, staff, the program, and how change or improvement may be realized

- Assumptions can be internal and external.
- Ask: What is known, and what is being assumed?



Problem Statement: Students in the district do not have enough access to high-quality learning experiences in science, technology, engineering, and mathematics (STEM) as they transition from middle to high school. Students of color and female students tend to be under-represented in STEM fields in higher education.

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Assumptions: 1) The professional learning is of high-quality; 2) The district and university leaders provide support for the STEM Partnership; 3) Teachers can apply what they have learned into inquiry-based curricula; 4) The PLCs are productive spaces for educator learning; 5) Local businesses and the community are open to hosting students during field trips.

Final thoughts on logic models

- Logic models are tools for program design, implementation, and evaluation.
- The process of developing a logic model is important: Engage stakeholders in developing a logic model.
- Logic models should be living documents and returned to frequently.
- Logic models are useful for evaluation but best when developed at the program design phase.

Handout 4: Completed Logic Model for Case Study



Developing Your Logic Model



Problem Statement: Strategies and **Short-term Outputs** Long-term **Impacts** Resources activities outcomes outcomes

Assumptions:

Problem Statement: Strategies and **Outputs** Resources **Short-term Impacts** Long-term activities outcomes outcomes **Assumptions:**

Problem Statement: Short-term Impacts Strategies and **Outputs** Long-term Resources activities **outcomes** outcomes **Assumptions:**

Next Steps



Homework

• Complete a draft of your logic model

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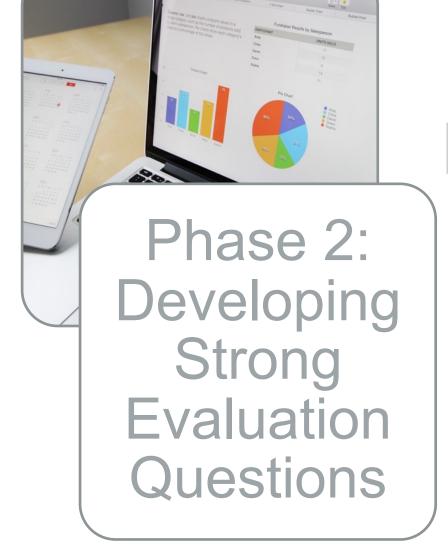
Phase 1: Preparing for Evaluation Workshop 1B



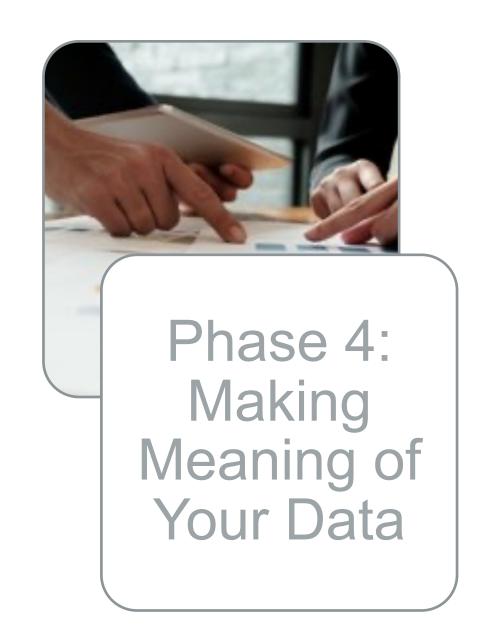
Workshop series sequence



evaluation









Today's goals

Participants will

- Practice using a logic model as a planning and evaluation tool
- Clarify what implementation of key professional development strategies look like in practice



Agenda

Quick review of last session

Logic model work time

Describing implementation of professional learning strategies/activities

Conclusion & next steps



Logic Model Work Time



Reflect on progress

- Where is there agreement?
- Where did you get stuck?
- What questions came up?



Describing Implementation of PD Strategies/Activities



Describing Implementation

- What does it look like to implement each of your professional development strategies/activities effectively?
- Establish shared understanding of high-quality implementation
- Align strategies/activities to intended outcomes
- Determine:
 - Who should participate in the strategies/activities
 - What content will be covered
 - Format of the activities
 - Frequency and duration of the activities

Handout 5: Describing Implementation



Describing Implementation

- Workshops: Who leads the workshops? Who participates? Is participation voluntary? How often are they held? What content is covered? Do workshops build on one another or can the content stand alone? What pedagogy is used? Is any follow-up support provided to help teachers implement what they have learned in the classroom?
- Coaching: Do coaches use a common approach to working with teachers? How are coaches hired, trained, and supported? How do you ensure coach quality? How are teachers assigned to work with coaches? Is it voluntary? How often do coaches meet with teachers and for how long? How are teacher learning goals identified? How do coaches use their time with teachers?
- Professional learning communities: How are teachers grouped into PLCs? How often do they meet? Is there a group leader? What are the goals of the PLCs and how is this determined? Does the group follow a protocol? How is the time used?

- Analyzing student work: Who participates in analysis of student work? What student work is used? How often is it analyzed? Is a particular protocol for looking at student work used? How is information from the analysis used?
- Peer observation: How many teachers participate? How are teachers selected to participate? How are peers matched? Is there a clear purpose for each observation and how is this purpose identified? How is this time used? Is there any guidance provided for the content or format of this time? Do they use an observation protocol? Is there an opportunity to pre-conference or debrief? How often do peers observe one another?
- School visits: What are the goals of school visits? How do you select schools or classrooms to visit? Do you use an observation protocol or some other tool to guide your experience? Who attends the school visits? How is the information learned documented or shared?



Strategy/Activity From logic model	Intended Outcomes From logic model	Participation Who participates? How are they selected? How are participants grouped? Is participation voluntary?	Content What content is addressed and by whom?	Format How is the learning activity structured? Is a protocol used?	Frequency and Duration How often does the learning activity take place and for how long?



Next Steps

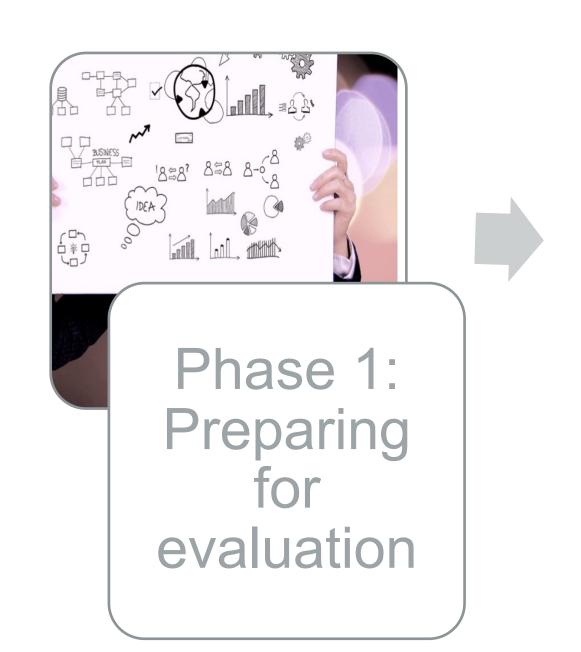


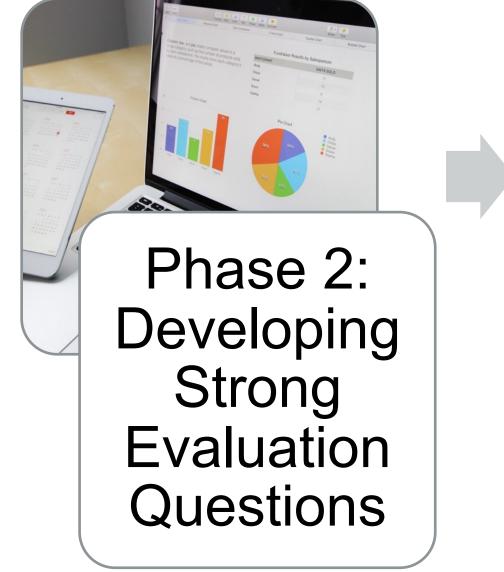
Homework

- Continue to refine your logic model
 - Finish draft
 - Get input from stakeholders
 - Refine based on stakeholder feedback
- Complete "Describing Implementation of PD Strategies/Activities" handout



Next Workshop











References and resources

- Darling-Hammond, L., Hyler, & M. E., Gardner, M. (2017). *Effective Teacher Professional Development*. Palo Alto, CA: Learning Policy Institute.
- Guskey, T.R. (2000) Evaluating professional development. Thousand Oaks, CA: Corwin Press.
- Mertens, D.M., & Wilson, A.T. (2012). *Program evaluation theory and practice: A comprehensive guide*. New York, NY: Guilford Press.
- Shakman, K., & Rodriguez, S. M. (2015). *Logic models for program design, implementation, and evaluation: Workshop toolkit*. US Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance.
- U.S. Department of Education. (2016). *Non-regulatory guidance: Using evidence to strengthen education investments.* Washington, DC: Author. Retrieved from: https://www2.ed.gov/policy/elsec/leg/essa/guidanceuseseinvestment.pdf
- W.K. Kellogg Foundation. (2004). *Logic model development guide*. Retrieved from: http://www.wkkf.org/resource-directory/resource/2006/02/wk-kellogg-foundation-logic-modeldevelopment-guide



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