

Evaluating Professional Learning: A Workshop Series Companion to the Tool

Phase 3: Developing a Data Collection Plan Workshop 3A

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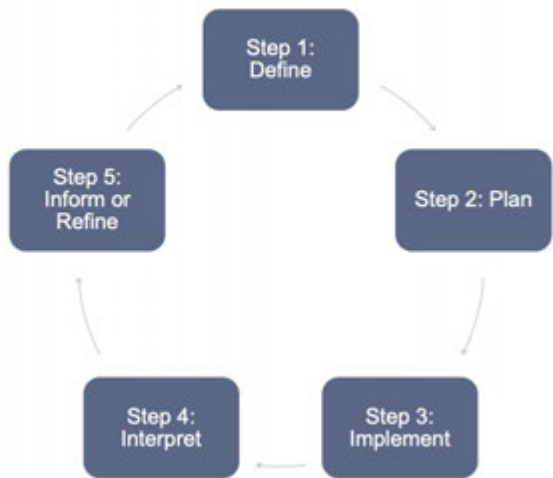
Workshop sequence

This workshop is the third of four in a series about planning for high-quality evaluations of professional learning.



- Remind participants that this workshop series will guide you through a four-phased evaluation process.
- Today, we will focus on the third phase, which focuses on developing a data collection plan.
- Briefly remind participants of phase 1 and 2, which were recently completed, and phase 4 ahead.
- **Phase 1: Preparing for Evaluation (complete)**
 - Learn about the process of evaluating professional learning and development
 - Create a logic model of the professional learning and development initiative
- **Phase 2: Developing Strong Evaluation Questions (complete)**
 - Defining audience and purpose
 - Identifying evaluation questions that align with program outcomes and outputs and making sure you have a mix of questions that address implementation and outcomes
 - Prioritizing evaluation questions
- **Phase 3: Collecting Data (Current phase)**
 - Advantages and disadvantages of various types of data sources, aligning existing data collection approaches with evaluation questions, identifying gaps in data collection, developing new tools and strategies to address these gaps
- **Phase 4: Analyzing Data (upcoming)**
 - Approaches to data analyses, considerations when interpreting results, ways to communicate results effectively

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

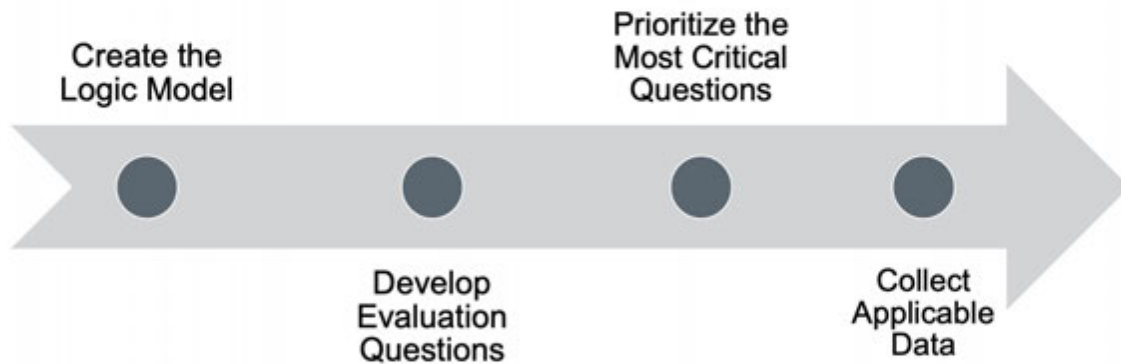
How should results be used and communicated?

Step 5: Inform OR Refine

What decisions can be made about the program?

- Remind participants that this is one model of continuous evaluation that we are going to use as a framework for the evaluation planning process. It was created for the US Department of Education as a free guide for educators to use evaluation.
- Walk through the five steps of the model and explain that steps one and two were addressed in prior workshops, step 3 will be the focus of the current phase, and steps 4 and 5 will be addressed in phase 4.

From Logic Model to Data Collection



What kind of information do you need in order to answer your questions?

- Tell the participants that this graphic illustrates the process of moving from your logic model to collecting data. Remind them that we're concerned with ensuring we have data that will provide information about our most important evaluation questions. Now that they have well-developed evaluation questions, they can use them as a guide in identifying applicable data.
- Tell the participants that the two critical questions they'll have to answer are 1) what information is needed in order to answer their evaluation questions?, and 2) what data can be collected, given data capacity and access?
- Prompt the participants to think about the purpose of their evaluation. Are they concerned with simply understanding/exploring the rollout of the implementation, or are they more concerned with measuring the resulting impact?

Today's Goals

Participants will:

- Understand the types of data sources that can be used to evaluate professional development activities.
- Work from their logic model to identify the data needed to answer their evaluation questions.
- Begin developing data collection plans for their initiative.

Describe the goals for today's workshop.

Agenda

- Check in on previous work
- Identify existing data related to your initiative
- Review types of evaluation data
- Identifying data sources to align with evaluation questions
- Next steps

Walk through the agenda.

Progress check: logic model and finalizing evaluation questions

- Ask each team member to share reflections from their work on the logic model and evaluation questions.

Guiding questions to finalize evaluation questions

- Are there questions addressing the most important short-term and long-term outcomes and impacts?
- Are there questions that will help you understand implementation?
- Will the questions address the needs of your key stakeholders?
- Are questions a similar grain size? Are there narrow questions that might be organized as sub-questions to a broader question?

- Use the guiding questions and ask participants to share any questions, challenges, and reflections.
- Allow participants to revise evaluation questions as needed.

Types of evaluation data

Advantages and disadvantages

- Tell participants that they will learn about different types of evaluation data, and advantages and disadvantages of each type.

Leveraging existing data sources

What data are you currently collecting related to your professional development initiative?	How is this information currently being used?	What evaluation question(s) might this information help you answer?

- Ask participants to brainstorm data they are currently collecting and how it is being used. Ask them to identify which of their evaluation questions each of these data sources might help to answer.
- Tell the participants to keep these data sources in mind as they learn about advantages and disadvantages of types of data.

Data sources: Where does your evidence come from?

Interviews
Focus groups
Surveys
Observations
Document review
Administrative records or extant (existing) data

Collecting multiple different types of data can provide a more holistic understanding of the program or initiative!



- Tell the participants this list represents some common data sources.
 - Some examples of administrative or extant data are assessment or test results, district demographics, teachers' evaluation ratings, etc.
- Ask participants to think about 1) if any of their data aligns with the types of data sources mentioned and 2) which of these data sources could help answer their evaluation questions. Ask participants to share their answers.

Data Sources: Interviews

Advantages	Disadvantages
<ul style="list-style-type: none">• Provide in-depth answers• Allows follow-up for more detail or clarification• Supports building connections between interviewer and interviewee	<ul style="list-style-type: none">• Time consuming• More costly due to time• Might not gain access to all participants• Self-report might not match behavior• No anonymity

Centers for Disease Control & Prevention (CDC), 2011; National Science Foundation, 2002; Puma, 2001.



- Review the content on the slide
- Check the chat for participant comments on their own data sources and make connections to their own initiative.

Data Sources: Focus Groups

Advantages	Disadvantages
<ul style="list-style-type: none">• Interaction of participants might enhance responses• Can be efficient way to collect qualitative data from a group	<ul style="list-style-type: none">• Group interaction might inhibit responses• Respondents might not be willing to talk in a group• Complex subject matter might not allow everyone to respond• No anonymity

Centers for Disease Control & Prevention (CDC), 2011; National Science Foundation, 2002; Puma, 2001.



- Review the content on the slide
- Ask participant to make connections to their own data sources and evaluation questions.

Data Sources: Surveys

Advantages	Disadvantages
<ul style="list-style-type: none">• Can cover a wide range of topics• Can include many participants• Relatively inexpensive to administer• Can include both quantitative (closed-ended) and qualitative (open-ended) questions• Can provide anonymity	<ul style="list-style-type: none">• Self-report might not match behavior• Might lack depth• Response rates are important

Centers for Disease Control & Prevention (CDC), 2011; National Science Foundation, 2002; Puma, 2001.



- Review the content on the slide
- Ask participant to make connections to their own data sources and evaluation questions.

Data Sources: Observations

Advantages	Disadvantages
<ul style="list-style-type: none">• Can collect evidence about behavior or application• Provides information about a situation or context	<ul style="list-style-type: none">• Time consuming• More costly due to time• Require trained observers• Presence of observer might affect behaviors• Observation might be atypical

Centers for Disease Control & Prevention (CDC), 2011; National Science Foundation, 2002; Puma, 2001.



- Review the content on the slide
- Ask participant to make connections to their own data sources and evaluation questions.

Data Sources: Document reviews

Advantages	Disadvantages
<ul style="list-style-type: none">• Data already exist• Provide information on historical trends or public attitudes• Unobtrusive	<ul style="list-style-type: none">• Analysis can be time consuming

Centers for Disease Control & Prevention (CDC), 2011; National Science Foundation, 2002; Puma, 2001.

- Review the content on the slide
- Ask participant to make connections to their own data sources and evaluation questions.

Data Sources: Administrative records/extant data

Advantages	Disadvantages
<ul style="list-style-type: none">• Provide “objective” information• Constructed to measure a particular indicator• Summarized using straightforward methods (e.g., statistics)	<ul style="list-style-type: none">• Might oversimplify the findings• Need to negotiate access to data (e.g., privacy considerations)

Centers for Disease Control & Prevention (CDC), 2011; National Science Foundation, 2002; Puma, 2001.



- Review the content on the slide
- Ask participant to make connections to their own data sources and evaluation questions.

Considerations for data collection

Monitoring Data Quality is a Continuous Process

**Are the data
representative?**

**Are the data
valid and
reliable?**

**Are the data
complete?**

- Tell participants that it's important to continually monitor data quality especially as they begin programming. This will allow them to identify unanticipated data collection challenges early on. Monitoring data quality entails periodically attending to a few questions to ensure data is being collected as planned:
- **[Box 1]** "Are the data representative?" This asks you to consider data that might fail to capture, or represent, all segments of the population. Do the data reflect the population of interest?
 - Do the data reflect the demographics of the population involved in your initiative?
 - Do the data include all stakeholders involved in your initiative?
- **[Box 2]** "Are the data valid and reliable?" This asks you to consider questions about whether the data are truly measuring our outcomes of interest (validity), and if it is capturing the data in a way that is consistent, or stable (reliability).
 - Have the data been collected in a consistent way?
 - Does the data collection instrument accurately measure the outcome(s) of interest?
- **[Box 3]** "Are the data complete?" Here we'd like to know if the data gathered from individual participants or respondents captures all the information we intended to capture? If you surveyed 100 people, but only 35 completed the survey, it would be important to consider whether you have enough complete data to answer your evaluation question.
 - Was the sample size large enough?
 - For surveys, did enough people respond?

Identifying data sources to align with evaluation questions

Tell participants that they will be introduced to a tool to help them identify and align data sources with their evaluation questions.

Matching data collection strategies to evaluation questions

Evaluation question	Data source	Does this currently exist?	What type of instrument?	When is it collected?	Who administers it?	Where are the data stored?	Notes
Example: Are teachers implementing student-centered instructional practices?	Principal observations	Yes	Observation protocol	Quarterly	Principals	Secure storage server	Data may need to be de-identified
Evaluation questions not yet addressed:							

- Tell participants that they will begin by reviewing the evaluation questions and data that is already collected that can be used to answer each question.
- Populate the chart with responses for one evaluation question as a model.
- Ask the participants:
 - Are these data sufficient to answer this evaluation question? What other data might you need?
 - What's the quality of these data? Do you feel confident that they are valid and reliable?

Activity:

- Complete the chart for each of the evaluation questions.
- Consider breaking into small groups or partners and assign different evaluation questions to each group.
- If you break into groups, return to the whole group and have each group share out.

Identifying gaps in the data

- What instruments were identified that do not yet exist?
- What evaluation questions are not yet aligned with a data source?
- Are there any concerns with the quality of any data sources?

- Ask participants to share their reflections for each of the questions.
- Document any notes or make updates to the table as participants share their thoughts.

Next steps

Homework

- Complete page 1 of the data collection planning template

- If participants were not able to finish filling out the table on evaluation questions and data sources, ask them to complete it before the upcoming session.
- Remind the group of the date, time, and place of the next workshop, workshop 3b.
- Tell participants that the upcoming session will focus on creating a data action plan and data collection calendar for their data sources.

Evaluating Professional Learning: A Workshop Series Companion to the Tool

Phase 3: Developing a Data Collection Plan Workshop 3B

Workshop sequence



- Remind participants that this workshop series will guide you through a four-phased evaluation process.
- Today, we will focus on the second half of the third phase, which focuses on developing a data collection plan.
- Briefly remind participants of phase 1 and 2, which were recently completed, and phase 4 ahead.
- **Phase 1: Preparing for Evaluation (complete)**
 - Learn about the process of evaluating professional learning and development
 - Create a logic model of the professional learning and development initiative
- **Phase 2: Developing Strong Evaluation Questions (complete)**
 - Defining audience and purpose
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 - Approaches to data analyses, considerations when interpreting results, ways to communicate results effectively

Today's Objectives

Participants will:

- Continue developing data collection plans for your initiative.
- Create an action plan for each data source.
- Learn about the importance of collecting baseline data.
- Create a data collection calendar to visually represent data collection activities across the year.

Share the objectives with the participants.

Agenda

- Check in on progress developing your data collection plan
- Introduce Data Source Action Plan
- Work time: Data Source Action Plan
- Plot data collection activities on a Data Collection Calendar
- Next steps

Read through the agenda.

Progress check: Data collection plan

Tell participants that this is a chance to share updates on their work on the data collection plan and further refine.

Data Collection Guiding Questions

- How is this data currently collected?
 - What is the format? (e.g. paper and pencil? Digitally? Etc...)
 - Who is responsible for collecting it? Where do they store it?
 - How is it reported?
 - Are their mechanisms to ensure reliability and validity of data? (e.g. norming for observation forms etc...)
- Is the data in a format that can easily....
 - Be compared across schools and districts?
 - Be aggregated across all participants?
 - Be represented in tables and graphs?
- Do we need permissions to access and analyze the data?

- For the existing data sources that participants identified in the data collection plan table, ask them to reflect on the guiding questions.
- Document responses in relevant columns of the data collection plan table.
- Tell the participants that their answers to these questions will help them complete the data action plan.

Developing a Data Action Plan

Tell the participants that they will use a tool to help them identify action steps related to each data source.

Baseline Data

- **Baseline data** is the information collected prior to the start of the initiative or intervention
- Baseline data is useful for:
 1. Understanding the current state of the outcomes of interest
 2. As a reference point to assess the progress of an initiative



Activity: What are some considerations and constraints for collecting baseline data for your own initiative?

(CDC, 2014; RIDE, n.d.)

- Introduce the participants to the purpose of baseline data. Emphasize that collecting baseline data prior to the start of the initiative is an important starting point. Baseline data can be used as a reference point as more data is collected throughout the evaluation.
- Ask the group to brainstorm considerations and constraints for collecting that data.
- As we move into the next step of creating a data action plan, you will want to include baseline data for each data source whenever possible

DATA ACTION PLAN

Category	Data Source	Data Source Status <ul style="list-style-type: none"> Does the data source already exist or does it need to be created? Can it be adapted from an existing resource? 	Baseline Data <ul style="list-style-type: none"> Should baseline data be collected for this data source? When should it be collected? 	Action Steps <ul style="list-style-type: none"> What tasks need to be completed to ensure the data is collected in a manner that facilitates analysis across schools and districts? What steps do we need to take to collect baseline data? 	Person Responsible	Other People Involved

- Give an overview of the table.
- Tell the participants that they should populate the "category" column with overarching categories related to their evaluation questions.
 - For example, if participants have several evaluation questions related to student outcomes, they could list "student outcomes" in the category column.
- Tell participants to list the data sources they identified in their data collection plan in the "data source" column, grouping them by the categories they are relevant to.
- Tell participants to complete the "action steps," "person responsible," and "other people involved columns." Guide participants to be as detailed as possible when identifying action steps.

Activity:

- Complete a row for one data source as a whole group.
- Consider breaking into small groups or partners to complete the remaining rows (data sources) in the table. Come back together as a whole group and discuss the questions on the next slide.

Data Action Plan Reflection

- Does our plan triangulate across a range of measures and data sources?
- What baseline data can you collect for each data source?
- Is the data collection plan feasible given our capacity?

Ask participants to reflect on these questions. Make any updates to the data action plan based on information shared in this discussion.

Data Collection Calendar

Tell participants that they will briefly review a tool for charting out data collection activities.

Data Collection Calendar: An Example

Data Source	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
PD exit surveys	X		X		X		X		X		X	
Student surveys	X					X						
Teacher focus groups				X						X		
Student Assessments					X							
Teacher Observations			X							X		

- Explain that this is an example of how they might plot out their data collection activities over the course of a year.
- The calendar helps to see the data collection demands across the year and make sure there isn't too much being asked of any one group at a particular time.
- Remind participants that it is good practice to plan times to come together for analysis and reflection for continuous improvement on a bimonthly or quarterly basis.

Homework: Data Collection Calendar

Data Source	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

Ask participants to begin completing the data collection calendar in advance of the next session.

Next steps

Homework

- Complete the data action plan and data collection calendar.
- Develop and adapt data collection tools as identified in your data action plan.
- Collect baseline data to review at next workshop.

Review the tasks for the team to complete before the next session.

Next Workshop



- Tell participants that the next workshop will focus on making meaning of your data.
- Tell the participants the date and time of the next workshop.

References and resources

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