

Integrating Program Evaluation Into Your School Improvement Work: Exploring the Program Evaluation Toolkit

October 15, 2021

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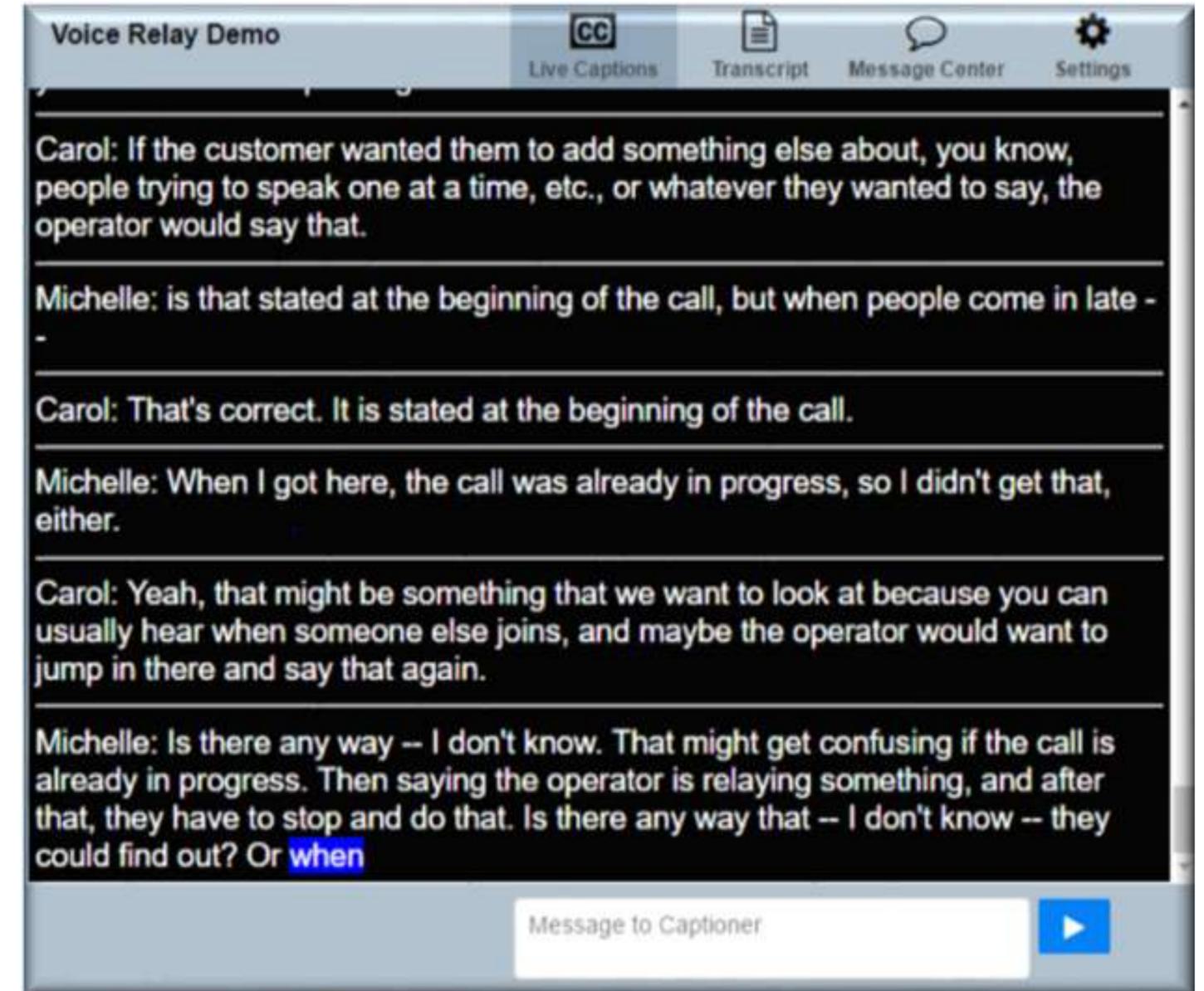
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Live-Captioning

- This webinar is being live-captioned. Please copy and paste the link sent to you in the chat box at the start of the webinar to take advantage of this service.
- A prepopulated sign-in page will appear. Please click “register.” There is no need to fill in your information.



The screenshot shows a software interface titled "Voice Relay Demo". At the top, there are four icons: a Creative Commons license icon, a document icon labeled "Live Captions", a speech bubble icon labeled "Transcript", and a gear icon labeled "Message Center" and "Settings". The main area is a black box with white text showing a transcript of a conversation. The transcript includes the following text:

Carol: If the customer wanted them to add something else about, you know, people trying to speak one at a time, etc., or whatever they wanted to say, the operator would say that.

Michelle: is that stated at the beginning of the call, but when people come in late -

Carol: That's correct. It is stated at the beginning of the call.

Michelle: When I got here, the call was already in progress, so I didn't get that, either.

Carol: Yeah, that might be something that we want to look at because you can usually hear when someone else joins, and maybe the operator would want to jump in there and say that again.

Michelle: Is there any way -- I don't know. That might get confusing if the call is already in progress. Then saying the operator is relaying something, and after that, they have to stop and do that. Is there any way that -- I don't know -- they could find out? Or **when**

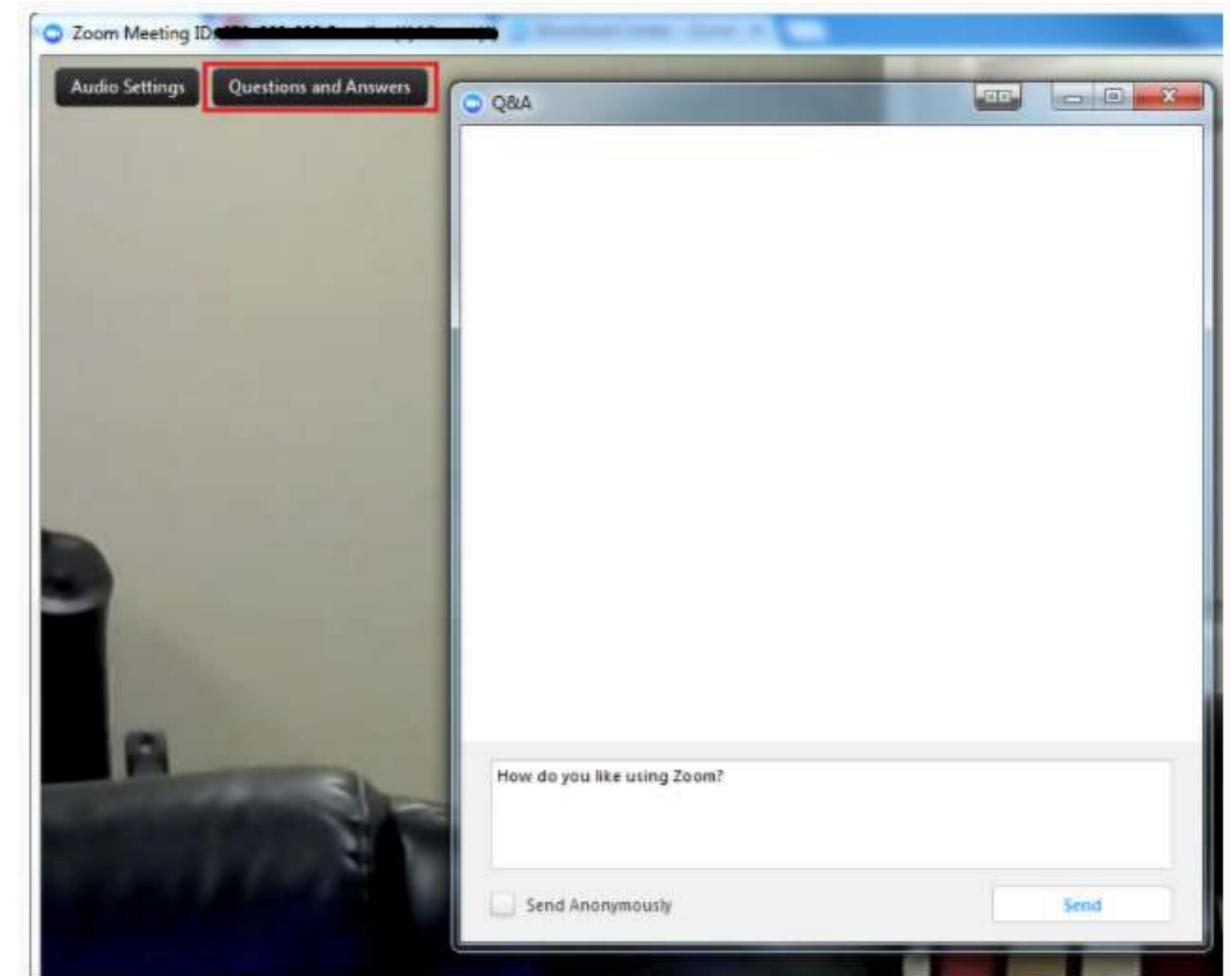
At the bottom of the interface, there is a text input field labeled "Message to Captioner" and a blue play button icon.

Q & A

To reduce background noise, we have muted all participants. Although chat has been disabled, you are welcome to communicate by using the Q & A box.

Your Participation

- We will monitor the Q & A box throughout the presentation. Please feel free to use it at any time for any comments or questions you have.
- Simply click on the Q & A box panel at the top left corner of your screen and send us your question.



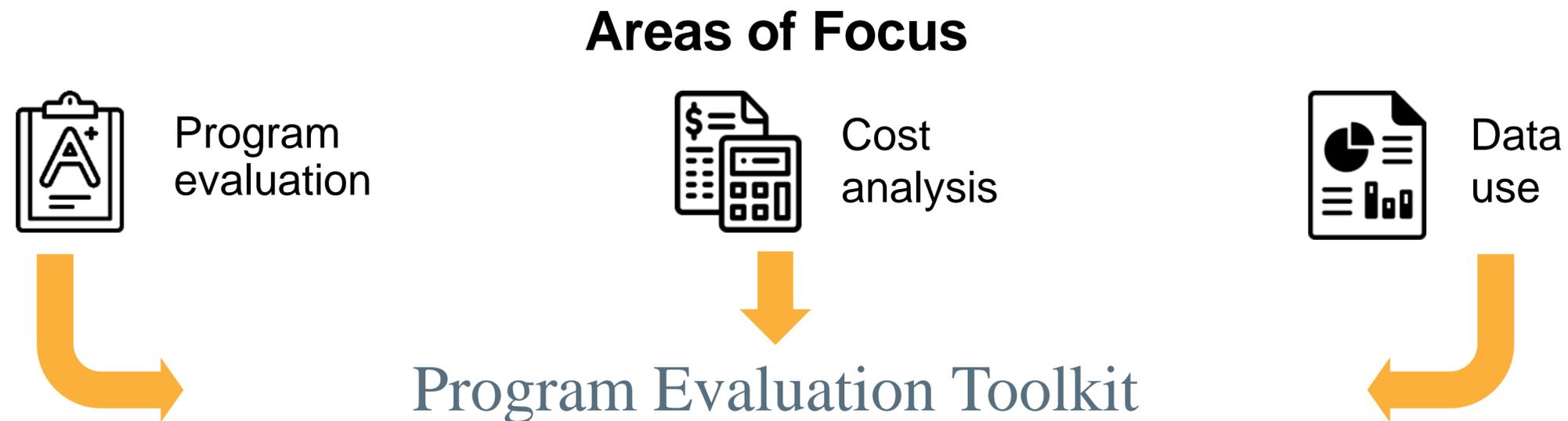
REL Central: Who We Are



The Regional Educational Laboratory (REL) Central at Marzano Research serves the applied education research needs of Colorado, Kansas, Missouri, Nebraska, North Dakota, South Dakota, and Wyoming.

REL Central: Colorado School Improvement Research Partnership

A partnership united by goals to support school improvement efforts throughout Colorado in order to improve student learning outcomes.



Meet Our Presenters

- Jeanette Joyce, REL Central
- Joshua Stewart, REL Central
- David Yanoski, REL Central
- Mckenzie Haines, REL Central

Meet Our Participants (Poll Question)

What is your role within your organization?

1. State administrator, official, or policymaker
2. Program evaluator
3. School or district leader
4. School board member or local education agency member
5. Other

Goals

1. To share how REL Central's Program Evaluation Toolkit can be used in a variety of education contexts.
2. To give an example of how to use the Program Evaluation Toolkit.

Introduction to the Program Evaluation Toolkit

Quick Start Guide

What you'll find in the quick start guide:

- What is the toolkit?
- What is program evaluation?
- Who should use the toolkit?
- Am I ready to use this toolkit?
- Where to start?
- What is included in the toolkit?

Regional Educational Laboratory
Central at Marzano Research

Program Evaluation Toolkit

Program Evaluation Toolkit Guiding Questions

Module 1 — Logic Models <ul style="list-style-type: none">• What is the purpose of a logic model?• How do I describe my intervention or program using a logic model?	Module 5 — Data Quality <ul style="list-style-type: none">• What available data do I have that can be used to answer my evaluation questions?• What is the quality of the available data?
Module 2 — Evaluation Questions <ul style="list-style-type: none">• How do evaluation questions relate to the logic model?• How do I write high-quality evaluation questions for my intervention or program?	Module 6 — Data Collection <ul style="list-style-type: none">• What data collection tools would be best to answer my evaluation questions?• How do I develop a simple but effective data collection tool?
Module 3 — Evaluation Design <ul style="list-style-type: none">• Which design will best meet my evaluation needs?• What is my desired and achievable level of evidence for the evaluation of my intervention or program?	Module 7 — Data Analysis <ul style="list-style-type: none">• What variables are related to my evaluation questions?• Which analysis method best meets my evaluation needs?
Module 4 — Evaluation Samples <ul style="list-style-type: none">• How do I determine whom to include in my data collection sample?• What types of demographic characteristics should I consider for my sample?	Module 8 — Dissemination Approaches <ul style="list-style-type: none">• How do I use findings to address the evaluation questions?• How do I communicate results to target audiences using appropriate graphics?

Navigating the Program Evaluation Modules Website

- Introduce website.
- Multiple entry points to website.
- Where to find content and tools.

Uses of the Program Evaluation Toolkit

- Developing programs.
- Evaluating program options.
- Implementing continuous improvement processes.
- Conducting evaluations.
- Collecting data for reporting purposes.
- Being a more informed consumer of evaluation services.

What Is Included in the Program Evaluation Toolkit?

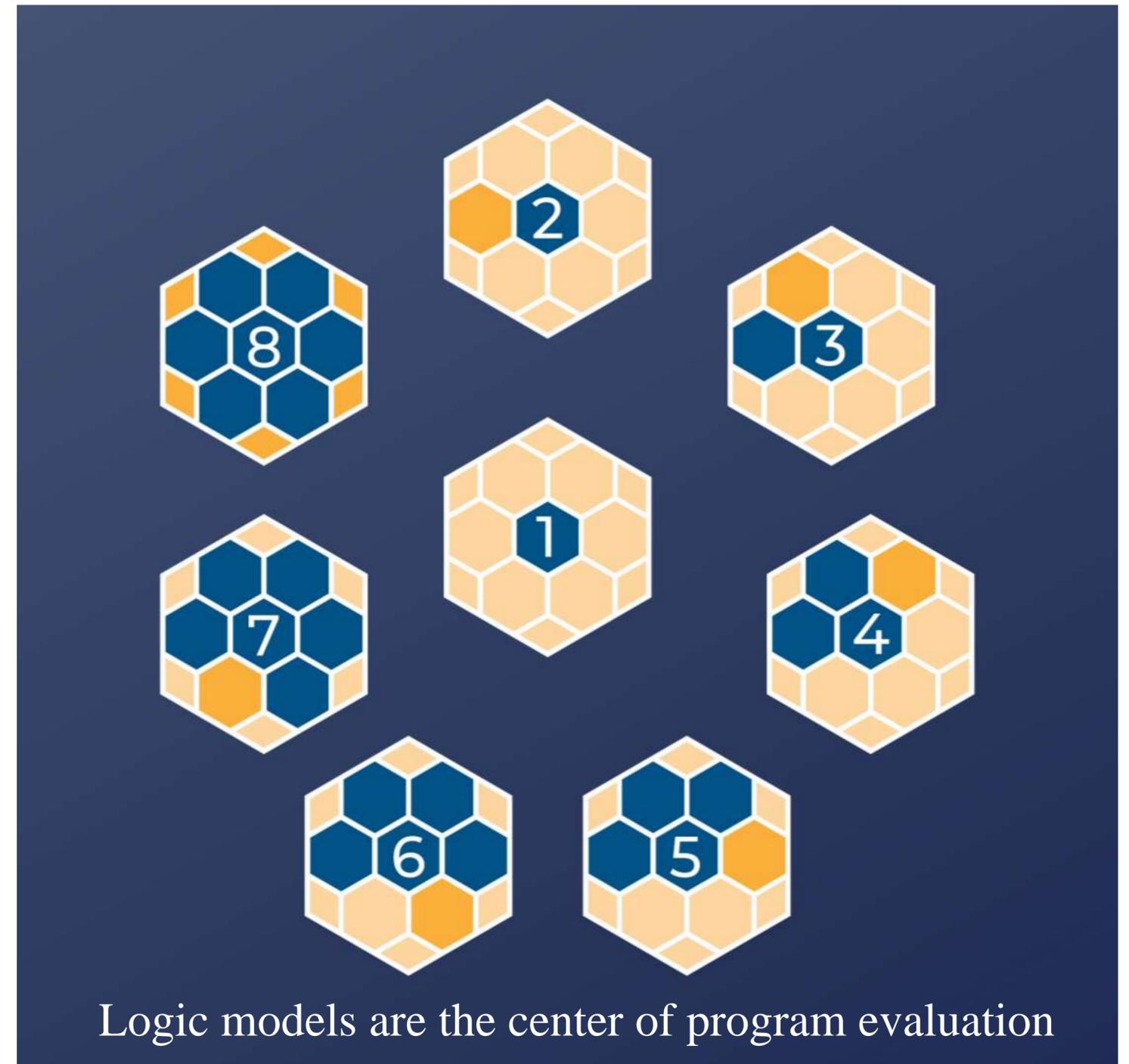
Module 1: Logic Models

Chapters

- Chapter 1: Understand the purpose and components of logic models
- Chapter 2: Write a problem statement to better understand the problem that the program is designed to address
- Chapter 3: Use the logic model to describe the program's resources, activities, and outputs
- Chapter 4: Use the logic model to describe the short-term, mid-term, and long-term outcomes of the program

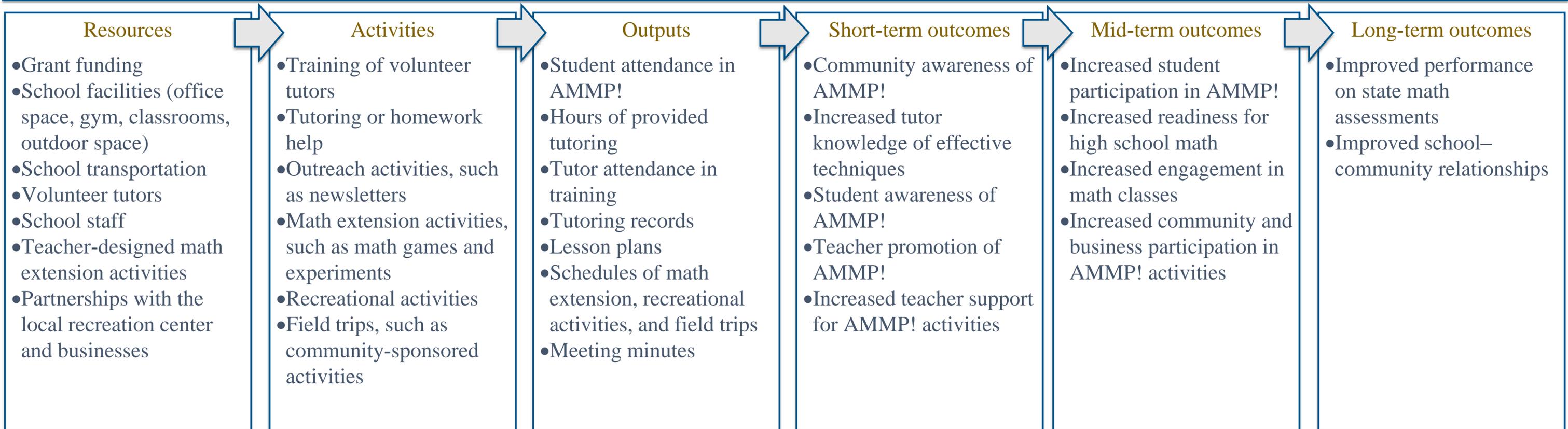
Resources

- AMMP! Logic Model
- Definitions of Logic Model Components
- Logic Model Template



Logic Model Template

Problem statement: Students at the middle school have experienced unfinished learning due to school closures as a result of COVID-19. Stakeholders, including district staff, students, parents, community services, and community members, are concerned about the unfinished learning. Research has indicated that unfinished learning in middle school is correlated with low math achievement. The school district has recently received a federal grant and would like to use these funds to address math achievement.



Additional considerations: Availability of tutors and school facilities. Including recreational activities will improve attendance.

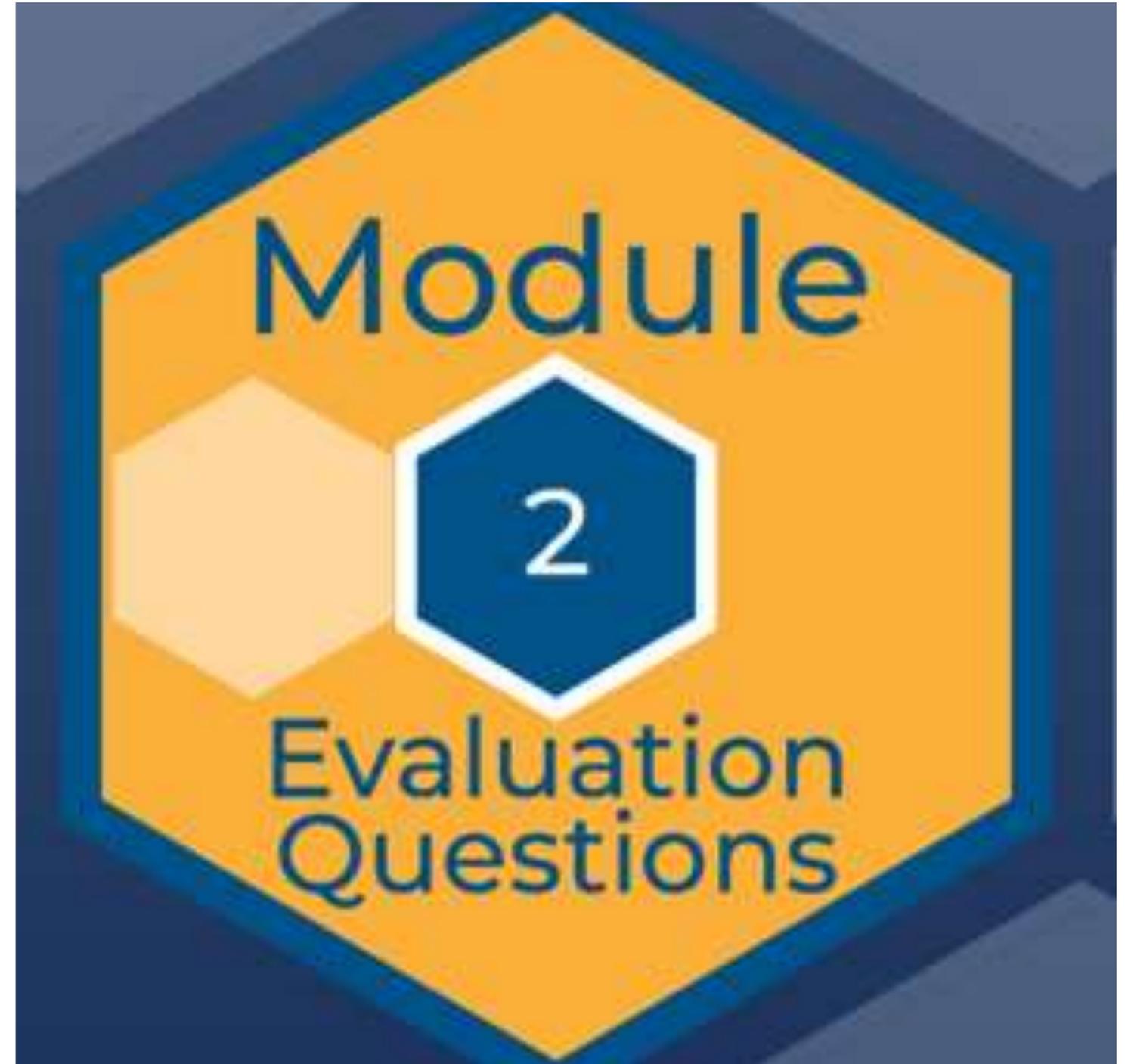
Module 2: Evaluation Questions

Chapters

- Chapter 1: Learn the difference between process and outcome evaluation questions and understand how they relate to your logic model
- Chapter 2: Use a systematic framework to write, review, and modify evaluation questions
- Chapter 3: Prioritize questions to address in your evaluation

Resources

- AMMP! Logic Model
- Identifying Evaluation Questions Worksheet
- Assessing Evaluation Questions
- Prioritizing Evaluation Questions Worksheet



Evaluation Questions

Process Questions

- How many students attended AMMP! each month?
- How many recreational activities were offered to AMMP! participants? What types?

Outcome Question

- How do AMMP! participants' scores on high school math placement tests compare to nonparticipants' scores?

Module 3: Evaluation Design

Chapters

- Chapter 1: Consider different evaluation design categories
- Chapter 2: Review threats to validity that you should consider when designing an evaluation
- Chapter 3: Inform your evaluation design with evidence guidelines

Resources

- AMMP! Logic Model
- Evaluation Design: Matching Activity
- <https://ies.ed.gov/ncee/wwc/>
- Guiding Questions: Evidence and Standards
- Evaluation Design Selection Worksheet



Evaluation Design Selection: Descriptive

- Document the number of volunteer tutors trained to ensure that there are enough staff to provide after-school homework support to students.
- Example descriptive design questions include the following:
 - How many volunteer tutors were trained to implement AMMP!?
 - How many tutoring hours, on average, did students receive?
 - What are the characteristics of students and volunteers participating in the program?
- Understand:
 - Whether enough tutors were trained.
 - Whether those tutors are meeting with students.
 - Whether the target population of students is being reached.

Module 4: Evaluation Samples

Chapters

- Chapter 1: Understand the purpose of sampling
- Chapter 2: Consider different sampling techniques
- Chapter 3: Use the techniques from chapter 2 to develop a sampling plan

Resources

- Representative Sample Activity
- The Generalizer (<https://www.thegeneralizer.org/>)
- AMMP! Logic Model
- Summary of Sampling Types
- Extra Practice with Sampling Types
- Sample Size Workbook
- Sample Size Workbook User's Guide
- Sampling Plan for Evaluation Questions



Sample Size Workbook: Single Mean Example

- Focus first on estimating a single mean for a continuous variable.
- Suppose AMMP! parents rate their satisfaction with their students' math homework completion on a scale of 0 percent to 100 percent satisfied.
 - The team assumes that the standard deviation of parent ratings is 4 percentage points.
 - The evaluation team wants to estimate the true average rating for all AMMP! parents to within plus or minus 1 percentage point.
- The evaluation team finds that they need 62 parents.

Confidence Intervals	
Confidence interval for a single mean	
Desired interval width (in standard deviation units)	0.5
Required sample size	62
Confidence interval for comparing two means	
Desired interval width (in standard deviation units)	0.5
Proportion of sample in group 1	0.75
Required sample size	328
Confidence interval for a single proportion	
Desired interval width (in percentage points)	8
Estimate of true proportion	0.6
Required sample size	577
Confidence interval for comparing two proportions	
Desired interval width (in percentage points)	16
Estimate of true proportion in group 1	0.7
Estimate of true proportion in group 2	0.5
Proportion of sample in group 1	0.25
Required sample size	705
Confidence interval for correlation	
Desired interval width	0.3
Expected correlation	0.1
Required sample size	168
► Confidence Intervals Power-Mean Difference Power-Proportion Dif	

Enter desired interval width divided by the standard deviation here.

Module 5: Data Quality

Chapters

- Chapter 1: Identify the two major types of data and describe how to use them in an evaluation
- Chapter 2: Evaluate the quality of your data, using six key criteria
- Chapter 3: Connect data to your evaluation questions

Resources

- AMMP! Logic Model
- Data Sources: Advantages and Disadvantages
- Data Quality Dimensions
- Data Quality Checklist
- Evaluation Matrix
- A Guide to Using State Longitudinal Data for Applied Research



Evaluation Matrix

Evaluation Question	Sample	Data	Collection Method	Time Frame	Analysis Method	Interpretation
<i>What evaluation question are you seeking to answer?</i>	<i>What type of sampling will you use? What will the sample size be for each group?</i>	<i>What data will you use to address this question (for example, assessment scores, survey responses, focus group data)?</i>	<i>How will you collect the data (for example, existing database query, online survey, in-person focus groups)?</i>	<i>When and how frequently will you collect the data?</i>	<i>How will you summarize the data so that the data are usable?</i>	<i>How will you reach a conclusion regarding your evaluation question?</i>
How do AMMP! participants' scores on high school math placement tests compare to nonparticipants' scores?	Convenience sampling of all participating and non-participating AMMP! students.	High school math placement test scores	Request high school math placement test data for students who did and did not participate in AMMP!.	Collect when students complete the high school math placement test.		
How many recreational activities were offered to AMMP! participants? What types?	Purposive sampling of teachers, parents, and students. Two total focus groups for students, parents, and teachers (six in total). Approximately eight for each focus group.	Focus group transcripts from teachers, parents, and students about recreational activities.	Collect focus group data from teachers, parents, and students, using audio recorders and notes.	Collect focus group data during the middle of the school year and again at the end.		

Module 6: Data Collection

Chapters

- Chapter 1: Plan and conduct interviews and focus groups
- Chapter 2: Plan and conduct observations
- Chapter 3: Design surveys

Resources

- AMMP! Logic Model
- Guidelines for Interviews and Focus Groups
- Guide to Conducting a Needs Assessment for American Indian Students
- AMMP! Interview Protocol
- AMMP! Focus Group Protocol
- Guidelines for Observations
- Existing Observation and Survey Instruments
- AMMP! Observation Protocol
- An Educator's Guide to Questionnaire Development
- Existing Observation and Survey Instruments
- Ordered Response Options for Rating Scales
- AMMP! Caregiver Perception Survey
- AMMP! Logic Model
- Interview, Focus Group, Observation, or Survey?
- Data Collection Instrument Draft



Data Collection Tool: Focus Group Protocol for Parents

- Think back to when you first heard about AMMP!. What were your initial thoughts about the program? What questions did you have?
 - Optional probing questions:
 - What did you discuss among yourselves about the program? Can you tell me more about what you thought?
 - Why did you think that about AMMP!?
 - Where did you hear about AMMP!?
 - What did you hear from other teachers/parents/students that led you to think that?
- How many recreational activities were offered? What types?
- What else do you think I should know about AMMP! that I have not asked about?

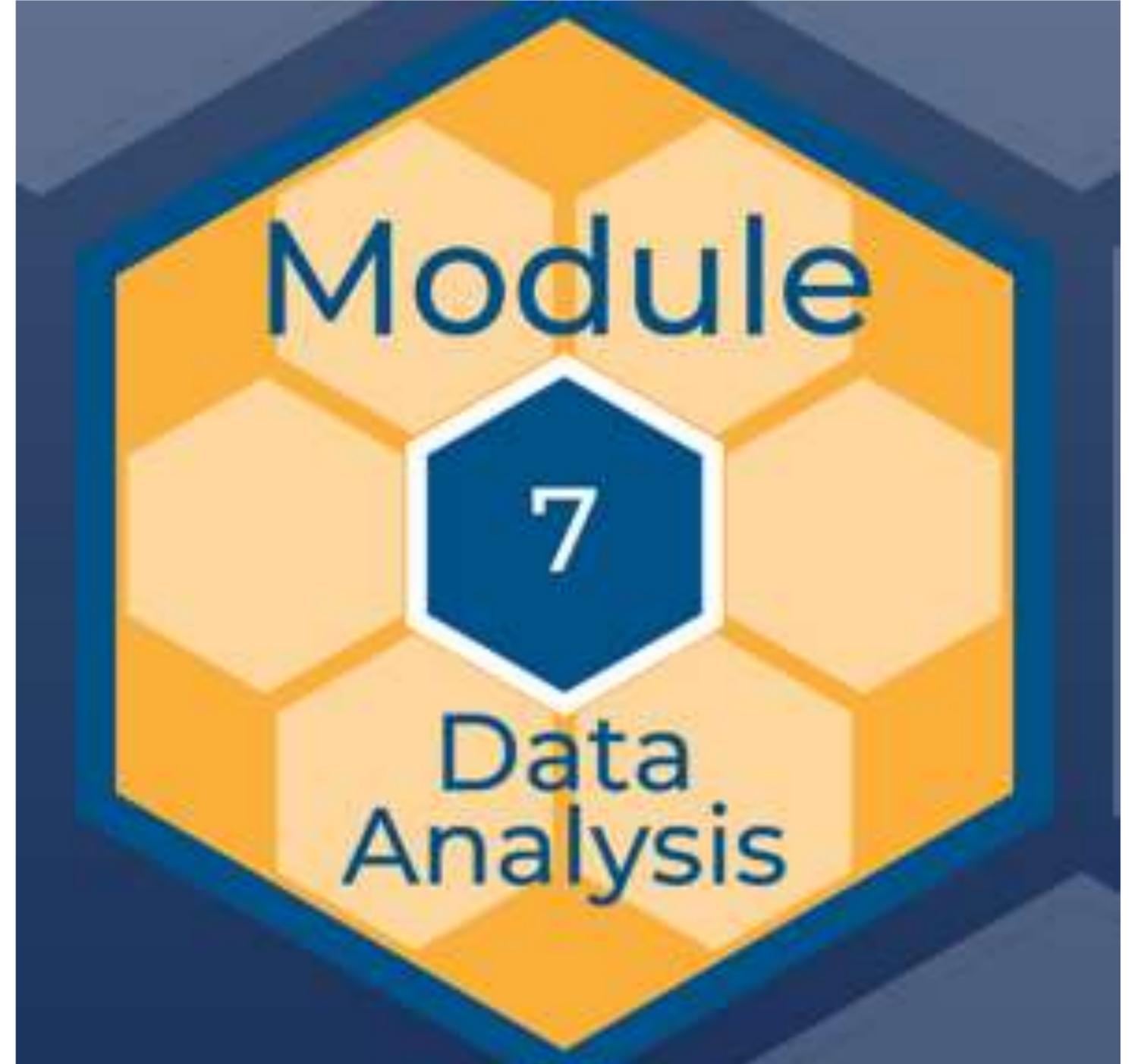
Module 7: Data Analysis

Chapters

- Chapter 1: Common approaches to data preparation and analysis
- Chapter 2: Basic analyses to build analytic capacity
- Chapter 3: A framework for understanding the implications of findings and making justifiable recommendations

Resources

- AMMP! Logic Model
- Guidelines for a Codebook
- Common Sources of Data Errors and Error-Checking Techniques
- Microsoft Excel Functions for Data Cleaning
- Survey Methods for Educators: Analysis and Reporting of Survey Data
- Qualitative Research Methods: A Data Collector's Field Guide
- Qualitative Research
- Cost Analysis: A Starter Kit
- Descriptive Statistics Activity
- Common Sources of Data Errors and Error-Checking Techniques
- Program Evaluation Toolkit Calculator
- Program Evaluation Toolkit Calculator: User's Guide
- Inferential Statistics Activity
- Microsoft Excel Functions for Data Cleaning
- Qualitative Analysis Activity
- Statistical Theory for the RCT-YES Software: Design-Based Causal Inference for RCTs
- Evidence to Insights (e2i) Coach
- Evaluation Matrix



Evaluation Matrix (Part 2)

Evaluation Question	Sample	Data	Collection Method	Time Frame	Analysis Method	Interpretation
<i>What evaluation question are you seeking to answer?</i>	<i>What type of sampling will you use? What will the sample size be for each group?</i>	<i>What data will you use to address this question (for example, assessment scores, survey responses, focus group data)?</i>	<i>How will you collect the data (for example, existing database query, online survey, in-person focus groups)?</i>	<i>When and how frequently will you collect the data?</i>	<i>How will you summarize the data so that the data are usable?</i>	<i>How will you reach a conclusion regarding your evaluation question?</i>
How do AMMP! participants' scores on high school math placement tests compare to nonparticipants' scores?	Convenience sampling of all participating and non-participating AMMP! students.	High school math placement test scores	Request high school math placement test data for students who did and did not participate in AMMP!.	Collect when students complete the high school math placement test.	Compare high school math placement test scores of AMMP! participants and nonparticipants, using ordinary least squares regression.	Participation in AMMP! was associated with higher scores.
How many recreational activities were offered to AMMP! participants? What types?	Purposive sampling of teachers, parents, and students. Two total focus groups for students, parents, and teachers (six in total). Approximately eight for each focus group.	Focus group transcripts from teachers, parents, and students about recreational activities.	Collect focus group data from teachers, parents, and students, using audio recorders and notes.	Collect focus group data during the middle of the school year and again at the end.	Code focus group transcripts for themes related to recreational activities at the middle and end of the school year.	Midyear focus group participants indicated that the number and types of recreational activities offered were not sufficient. More recreational activities were offered as a result.

Module 8: Dissemination Approaches

Chapters

- Chapter 1: How to develop a dissemination plan
- Chapter 2: Best practices in data visualization

Resources

- Dissemination Plan Template
- Determining the Audience
- Dissemination Approaches: Pros and Cons
- Media Release Template
- Summary Template
- Infographic Considerations
- Federal Plain Language Guidelines and Checking Recommendations for Plain Language
- Key Considerations for Accessibility
- Forum Guide to Data Visualization: A Resource for Education Agencies
- Data Visualization Checklist



Dissemination Plan

- Audience: Who are you trying to reach? What groups or organizations can you use to help reach this audience?
- Message: What is the purpose for the dissemination? What key findings from the evaluation will be of interest to the audience?
- Approach: Which dissemination approach will best meet your needs?
- Timing: When will the dissemination begin and end?
- Responsible party: Who will lead the dissemination efforts?

Audience	Message	Approach	Timing (Start–Finish)	Responsible Party
Funders	85 percent of AMMP! tutors plan to use effective techniques	Evaluation report	May – June 2022	Jeanette J.

Questions?

Reference

1. Stewart, J., Joyce, J., Haines, M., Yanoski, D., Gagnon, D., Luke, K., Rhoads, C., & Germeroth, C. (2021). *Program Evaluation Toolkit: Quick start guide* (REL 2021–112). U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Central. <http://ies.ed.gov/ncee/edlabs>.

Thank You

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