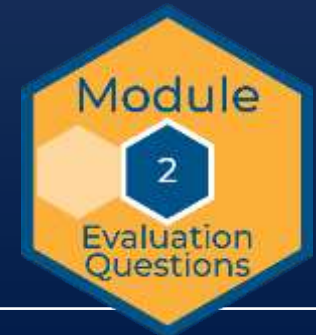




Chapter 2



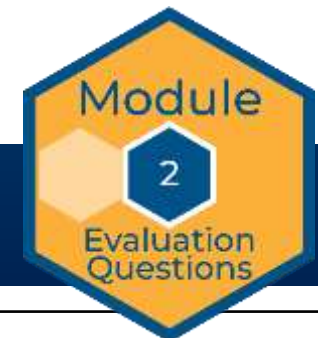
How to Write Quality Evaluation Questions



The Importance of Drafting the Right Evaluation Questions

“The most serious mistakes are not being made as a result of wrong answers. The truly dangerous thing is asking the wrong question.”

—Peter Drucker



What Makes a Good Evaluation Question?^{1,2}



Pertinent

Peripheral

Answerable

Unanswerable

Reasonable

Unreasonable

Specific

Vague

Evaluative

Nonactionable

Complete

Incomplete

What Makes a Good Evaluation Question? (cont.)

The PARSEC framework:

- **Pertinent:** Is the question meaningful to participants and stakeholders?
- **Answerable:** Are the data needed to answer the question available or attainable?
- **Reasonable:** Is the question aligned with what can be practically achieved?
- **Specific:** Is the question aligned with a logic model component?
- **Evaluative:** Will the answer to the question be actionable?
- **Complete:** Are there any questions that should be asked?

Assessing Evaluation Questions

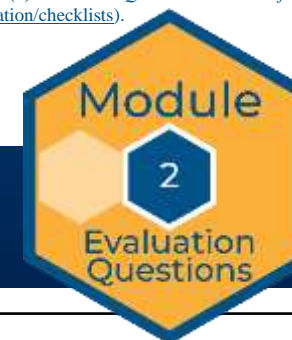
Evaluation Question:		
Does the Evaluation Question Meet This Criterion?	Yes	No
1. Pertinent		
Does your evaluation question relate to the information that program stakeholders want to obtain from the evaluation?		
Does your evaluation question come directly from your program logic model?		
2. Answerable		
Can your evaluation question be answered using available and attainable data?		
3. Reasonable		
Does your evaluation question link to what your program can practically and realistically achieve or influence?		
4. Specific		
Is your evaluation question clearly worded?		
Does your evaluation question avoid broad generalizations?		
5. Evaluative		
Will your evaluation question produce actionable answers and inform next steps?		
6. Complete		
Does your set of evaluation questions address all the logic model components that are of critical interest?		

Note. Adapted from (1) *Good Evaluation Questions: A Checklist to Help Focus Your Evaluation*, by the Centers for Disease Control and Prevention, National Asthma Program, 2013 (https://www.cdc.gov/asthma/program_eval/AssessingEvaluationQuestionChecklist.pdf); and (2) *Evaluation Questions Checklist for Program Evaluation*, by L. Wingate and D. Schroeter, 2016, Western Michigan University (<https://wmich.edu/evaluation/checklists>).



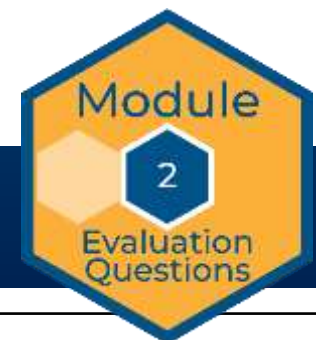
Additional Resources

- *Assessing Evaluation Questions*



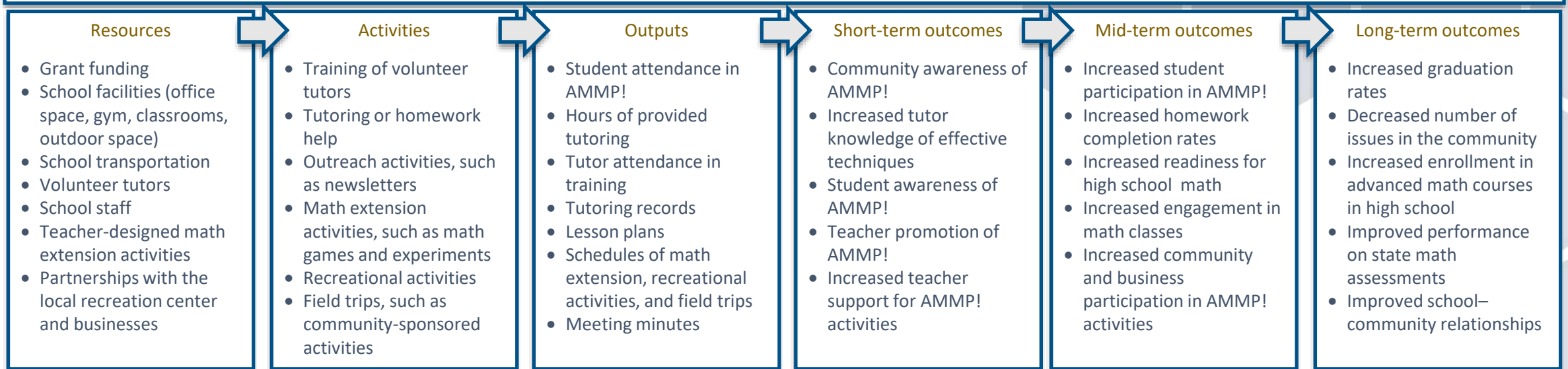
AMMP!

- A middle school has been experiencing
 - low rates of math homework completion, which may contribute to low math achievement scores; and
 - high numbers of unsupervised students, which may contribute to community issues.
- AMMP! offers math tutoring, math extension, homework completion support, recreational activities, and field trips during after-school hours.



AMMP! Logic Model (1 of 2)

Problem statement: Students at the middle school have low homework completion rates (lower than 40 percent) and low performance on state math assessments (only 25 percent proficient or advanced). In addition, the community around the middle school is experiencing issues with unsupervised students after school. Incidents involving middle school students are up 17 percent over the last three years. Stakeholders, including school staff, students, parents, community services, property owners, and businesses, are concerned about the low performance and unsupervised after-school time. Research has indicated that low math performance in middle school is correlated with low graduation rates and that unsupervised after-school time is related to an increase in community issues. The school district has recently received a federal grant and would like to use these funds to address the problem.



Additional considerations: Availability of tutors and school facilities. Unsupervised after-school time results in increased community issues. Including recreational activities will improve attendance.

Draft AMMP! Evaluation Questions

Process evaluation questions:

1. How many students attended AMMP!?
2. Did tutors enjoy receiving professional development?

Outcome evaluation questions:

1. Did students report having more math homework?
2. How much did students' test scores increase three years after the program was implemented?

The Pertinent Criterion

- A pertinent question is strongly related to the information that program stakeholders want to obtain from the evaluation. Pertinent questions come directly from the program logic model.
 - What, if any, changes would you make to the questions below to make them more pertinent?
 1. How many students attended AMMP!?
 2. Did tutors enjoy receiving professional development?
 3. Did students report having more math homework?
 4. How much did students' test scores increase three years after the program was implemented?

Pertinent Questions

Original Questions

1. How many students attended AMMP!?
2. Did tutors enjoy receiving professional development?
3. Did students report having more math homework?
4. How much did students' test scores increase three years after the program was implemented?

More Pertinent Questions

1. How many students attended AMMP! each month?
2. Did tutors increase their knowledge of effective tutoring techniques?
3. Did students complete more math homework?
4. No change to the question.

The Answerable Criterion

- A question is answerable if the data needed to answer the question are available or attainable.
 - What, if any, changes would you make to the questions below to make them more answerable?
 1. How many students attended AMMP! each month?
 2. Did tutors increase their knowledge of effective tutoring techniques?
 3. Did students complete more math homework?
 4. How much did students' test scores increase three years after the program was implemented?

Answerable Questions

Original Questions

1. How many students attended AMMP! each month?
2. Did tutors increase their knowledge of effective tutoring techniques?
3. Did students complete more math homework?
4. How much did students' test scores increase three years after the program was implemented?

More Answerable Questions

1. No change to the question.
2. No change to the question.
3. No change to the question.
4. How much did students' end-of-year test scores increase after the program was implemented?

The Reasonable Criterion

- **Reasonable:** A question is linked to what a program can practically and realistically achieve or influence.
 - What, if any, changes would you make to the questions below to make them more reasonable?
 1. How many students attended AMMP! each month?
 2. Did tutors increase their knowledge of effective tutoring techniques?
 3. Did students complete more math homework?
 4. How much did students' end-of-year test scores increase after the program was implemented?

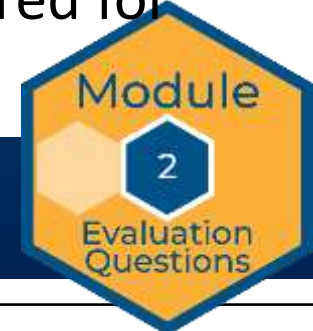
Reasonable Questions

Original Questions

1. How many students attended AMMP! each month?
2. Did tutors increase their knowledge of effective tutoring techniques?
3. Did students complete more math homework?
4. How much did students' end-of-year test scores increase after the program was implemented?

More Reasonable Questions

1. No change to the question.
2. How many tutors received professional development? How much did they receive?
3. No change to the question.
4. Do high school teachers report that students are more prepared for high school math?



The Specific Criterion

- **Specific:** A question is clearly worded and avoids broad generalizations.
 - What, if any, changes would you make to the questions below to make them more specific?
 1. How many students attended AMMP! each month?
 2. How many tutors received professional development? How much did they receive?
 3. Did students complete more math homework?
 4. Do high school teachers report that students are more prepared for high school math?

Specific Questions

Original Questions

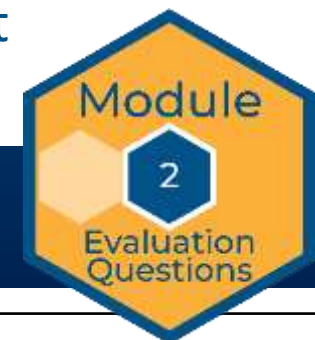
1. How many students attended AMMP! each month?
2. How many tutors received professional development? How much did they receive?
3. Did students complete more math homework?
4. Do high school teachers report that students are more prepared for high school math?

More Specific Questions

1. No change to the question.
2. How many tutors received professional development on effective math strategies? How much professional development on effective strategies did they receive?
3. How does the completion rate of homework with better than 80 percent accuracy compare between AMMP! participants and nonparticipants?
4. How do AMMP! participants' scores on high school math placement tests compare to nonparticipants' scores?

The Evaluative Criterion

- **Evaluative:** A question will produce actionable answers and will inform next steps.
 - What, if any, changes would you make to the questions below to make them more evaluative?
 1. How many students attended AMMP! each month?
 2. How many tutors received professional development on effective math strategies? How much professional development on effective strategies did they receive?
 3. How does the completion rate of homework with better than 80 percent accuracy compare between AMMP! participants and nonparticipants?
 4. How do AMMP! participants' scores on high school math placement tests compare to nonparticipants' scores?



Evaluative Questions

Original Questions

1. How many students attended AMMP! each month?
2. How many tutors received professional development on effective math strategies? How much professional development on effective strategies did they receive?
3. How does the completion rate of homework with better than 80 percent accuracy compare between AMMP! participants and nonparticipants?
4. How do AMMP! participants' scores on high school math placement tests compare to nonparticipants' scores?

More Evaluative Questions

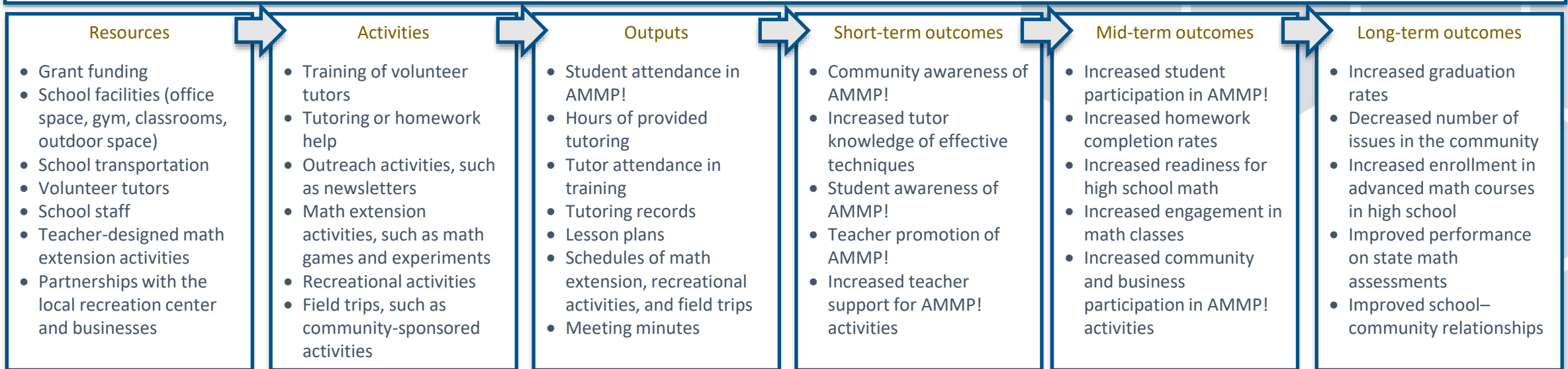
1. No changes to the question.
2. No changes to the question. Added: What barriers existed to providing professional development on effective strategies?
3. No change to the question. Added: What barriers exist that prevent AMMP! participants from completing homework?
4. No change to the question.

The Complete Criterion

- **Complete:** The entire set of evaluation questions addresses all the logic model components that are of critical interest.
 - What questions should have been asked but were not?

AMMP! Logic Model (2 of 2)

Problem statement: Students at the middle school have low homework completion rates (lower than 40 percent) and low performance on state math assessments (only 25 percent proficient or advanced). In addition, the community around the middle school is experiencing issues with unsupervised students after school. Incidents involving middle school students are up 17 percent over the last three years. Stakeholders, including school staff, students, parents, community services, property owners, and businesses, are concerned about the low performance and unsupervised after-school time. Research has indicated that low math performance in middle school is correlated with low graduation rates and that unsupervised after-school time is related to an increase in community issues. The school district has recently received a federal grant and would like to use these funds to address the problem.



Additional considerations: Availability of tutors and school facilities.

Unsupervised after-school time results in increased community issues. Including recreational activities will improve attendance.

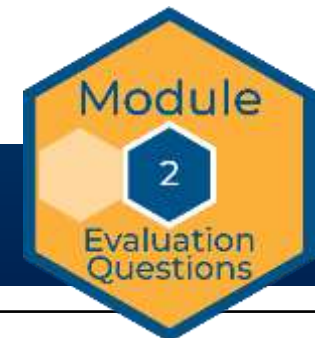
Revised AMMP! Evaluation Questions

Process Questions

- What is the total number of participants in AMMP!?
- How many students attended AMMP! each month?
- How many recreational activities were offered to AMMP! participants? What types?
- How many tutors received professional development on effective math strategies?
- How much professional development on effective strategies did they receive?
- What barriers existed to providing professional development on effective strategies?
- How have teachers at the middle school promoted AMMP!?

Outcome Questions

- How does the completion rate of homework with better than 80 percent accuracy compare between AMMP! participants and nonparticipants?
- What barriers exist that prevent AMMP! participants from completing homework?
- How do AMMP! participants' scores on high school math placement tests compare to nonparticipants' scores?



Activity to Draft Evaluation Questions

- Complete the *Identifying Evaluation Questions Worksheet*, using your logic model to create a list of evaluation questions related to the implementation and outcomes of your program.





Chapter 2 Complete

1

2

3

Recommended next: Chapter 3 – How to Prioritize Evaluation Questions



Thank You

Please visit our website and follow us on Twitter
for information about our events, priorities, and research alliances,
and for access to our many free resources.

ies.ed.gov/ncee/edlabs/regions/central/index.asp

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or contact us at

RELCentral@marzanoresearch.com

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References

1. Centers for Disease Control and Prevention, National Asthma Program. (2013). *Good evaluation questions: A checklist to help focus your evaluation*. https://www.cdc.gov/asthma/program_eval/AssessingEvaluationQuestionChecklist.pdf
2. Wingate, L., & Schroeter, D. (2016). *Evaluation questions checklist for program evaluation*. Western Michigan University. <https://wmich.edu/evaluation/checklists>