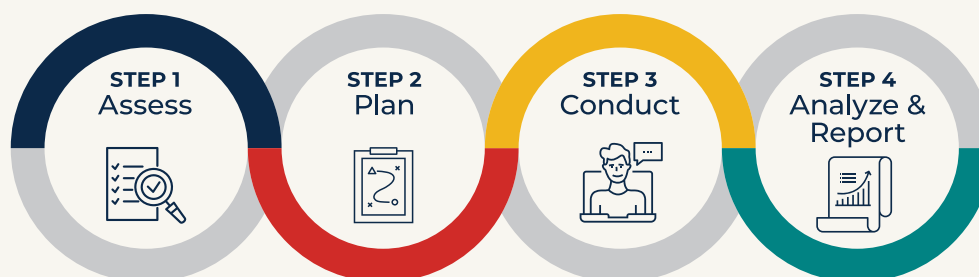




Guide to Setting Targets for Research Questions

This tool is part of Mathematica's suite of measurement and evaluation (M&E) tools, which provides a road map for generating timely and actionable evidence about what works for whom, and in what context. The tools were designed to promote rapid innovation and scaling of promising solutions (such as programs, practices, or products). The Guide to Setting Targets for Research Questions is used in Step 2 of the M&E process.



Learn more about the M&E process and other tools here:

<https://www.mathematica.org/features/advancing-educational-equity>

Who should use this Guide to Setting Targets for Research Questions?

This guide is designed for organizations implementing solutions, with support from a research partner. The research partner could be staff within the organization who have expertise in evaluation, or an external organization, technical assistance provider, or consultant.

What is this Guide to Setting Targets for Research Questions?

When specifying research questions in an [M&E plan](#), setting targets for desired results is a useful way to set expectations for the solution. Targets enable organizations or their funders to define success. This guide describes how organizations at different stages of solution development and implementation can set and use targets in their evidence-building work.

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Setting targets for research questions

When creating a measurement and evaluation (M&E) plan, organizations implementing solutions or their research partners should define a set of targets for each research question they will measure. These targets should be presented in a table with the associated research question, design type and comparison group (if applicable), and measure. Additional details can be included in the narrative text of the M&E plan (for example, details on the sample for the study groups).

Organizations may consider using two types of targets: (1) process targets, which focus on how the organization will use results to refine the solution, and (2) outcome targets, which set expectations for what the solution itself will achieve.

Process targets are more common for solutions undergoing development or early implementation or for organizations that have not yet systematically documented implementation or early evidence of success. These organizations may not be ready to measure outcomes.

Outcome targets set expectations for the amount of growth or impact the solution will have on a specific outcome, such as student test scores. Outcome targets should include different levels of success, such as OK, Good, and Great.

Integrating equity and community voice when setting M&E targets for processes and outcomes

- Were the targets for processes and outcomes set in a way that the community would find accessible and relevant? Could you clearly explain the process and outcomes targets to community collaborators?
- When and how will you share with the community how the process and outcomes targets will be used (such as how they will inform future decision-making)?
- Have you considered potential benefits and risks for the community if the process and outcomes targets are attained (or not attained)?
- Do the targets clearly evaluate the solution without implying blame to the community if outcome targets are not met?

All target levels should be ambitious, with Great targets reflecting the most ambitious expectations for changes in outcomes. This guide contains additional information about how to create strong targets, denoted by the acronym **SAM**: **S**ample defined, **A**mbitious or **A**ctionable, and **M**easurable.

SAM target checklist

- Sample defined:**
 - The sample for the target, meaning who the organization will collect data from, is defined (for example, teachers who participated in a training offered as part of the solution).
 - The sample for the comparison group, meaning who the organization will compare the users or participants to, should also be defined, if applicable (for example, students attending similar schools not implementing the solution).
- Ambitious (outcome target) or actionable (process target):**
 - Outcome targets are ambitious:*
 - Ambitious targets are attainable but constitute a meaningful change in the educational trajectory of students in the community in focus. You might need to use existing data before setting targets to understand typical performance for students and teachers, or how students and teachers perform when they first enroll in the solution.
 - Consult existing research on the likelihood of achieving different outcomes when setting targets to determine what constitutes a reasonable or typical increase. This is especially important when using measures that have historical data or prior research, such as standardized tests. When feasible, the M&E plan should cite prior research on the solution or a similar solution to show that the target thresholds are ambitious. When reviewing prior research, consider the following factors:
 - a. Intensity of the intervention (how often is it offered and for how long?)
 - b. Comparison condition (if applicable, who are the students and teachers being compared to?)
 - c. Baseline level, when possible (is there room for growth?)
 - d. Breadth of the measure (is it narrow, addressing an individual construct, or broad, addressing a set of constructs?)

When prior research is not available, provide a strong theoretical justification for why the targets are ambitious.
 - Outcome targets should have three levels—OK, Good, and Great—to define different levels of success. The Great target should represent very ambitious performance, above what previous evidence has shown for similar solutions. Good targets represent ambitious performance (slightly lower expectations), and OK targets represent somewhat ambitious performance (lowest expectations that would be acceptable).
 - Targets are actionable:* For process targets, results should be actionable, and the target should include details on how the information will be used (for example, a target may specify that the organization will use feedback to revise implementation guidance). This kind of target requires only one level: Good.

Measurable:

- Name the instruments or clearly specify constructs:** For example, if the target addresses improved mindsets, identify a specific mindset instrument, such as the Mathematical Mindsets Survey in your M&E plan. If your M&E plan does not name a specific instrument, instead specify the content or focus of the questions the organization will ask or the features of the practice that will be observed.
- Target is aligned with the measurement approach or instrument you will use:** For example, if you want to know how many teachers demonstrate a growth mindset, use a measurement tool with which you can score individual responses. In this case, a survey might be aligned but a focus group would not because it is not designed to document individual responses.
- Target outlines a clear definition for the thresholds and criteria:** For example, if the target indicates teachers will demonstrate a growth mindset, your M&E plan should define what constitutes a growth mindset, such as scoring at least 80 percent on a specific mindset measure.