Measurement and Evaluation Checklist

As the evaluation technical assistance partner for two portfolios of investments in Middle Years Math and Secondary Writing—funded by the Bill & Melinda Gates Foundation—Mathematica developed a set of tools to support grantees through a measurement and evaluation (M&E) process. The goal of these portfolios is to develop, refine, and scale evidence-based solutions (programs, products, or practices) that demonstrate success in improving educational outcomes for students who are Black, Latino, and/or experiencing poverty (the priority communities for the grants).

To expand the reach of this work and promote the adoption of evidence-based solutions more broadly, Mathematica has adapted the suite of M&E tools for a broader set of users— organizations implementing solutions, funders, research partners, and other stakeholders. The tools are designed to help users implement the M&E process in their own work. Organizations or individuals may choose to use one tool or the full set and can adapt the tools to their needs.

What is the M&E process?

The M&E process is designed to promote rapid innovation and scaling of promising solutions through generating timely and actionable evidence about what works for whom, and in what context. It uses an iterative approach to evidence building, in which the focus and design of the research is aligned to the solution's phase of development. Checkpoints are built in throughout to encourage users to pause and reflect on what has been learned so far and to refine the solution and the M&E plan as needed. More information on this iterative approach to evidence building and the phases of development is available **here**.

In each evidence-building phase, the M&E process has four key steps (Figure 1). In Step 1, organizations articulate their M&E goals, interests, and needs. In Step 2, they develop a plan— including research questions—to guide the M&E work. In Step 3, they execute the M&E plan designed in Step 3, including collecting the data needed to address each research question. Finally, in Step 4, organizations analyze the data they collected in Step 3, determine next steps, and report the findings.

Figure 1. Steps in the M&E process
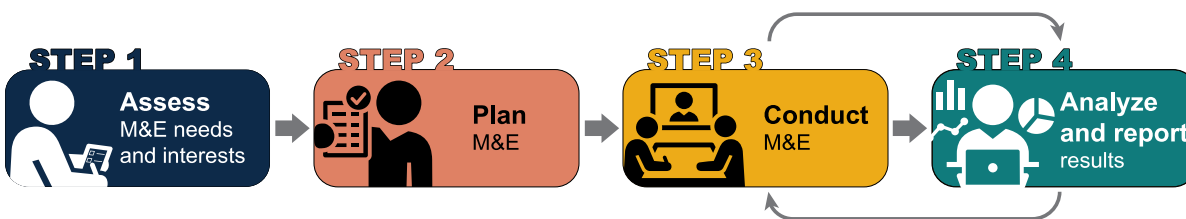
The M&E process centers on equity and community voice as a core principle. Across all steps, organizations are encouraged to meaningfully engage community stakeholders to ensure the solution builds on the strengths and assets and meets the needs of the community it is intended to serve.

Who should use the Measurement and Evaluation Checklist?

Funders and organizations, with support from a research partner, can use or adapt the checklist.

What is the Measurement and Evaluation Checklist?

The M&E Checklist is a resource that guides users through an evidence-building process as they design, refine, and test a solution in collaboration with stakeholders from the priority community. The M&E Checklist includes four documents—one for each of the evidence-building phases: Design the Solution (Phase 1), Refine the Solution (Phase 2), Assess for Early Evidence of Success (Phase 3), and Validate Effectiveness (Phase 4). The checklist activities focus on iterative learning, which may mean completing a phase multiple times, moving backwards to a previous phase, or abandoning a solution altogether. The checklist serves several purposes:

✓ **Design and evaluation planning.** Organizations designing and implementing solutions can use the M&E Checklist with support from a research partner during Step 2, Plan M&E, as a guide to develop a detailed M&E Plan—or road map—to address key research questions for a given phase of the solution's development.

✓ **Reporting.** Organizations—and funders, where relevant—can also use the M&E Checklist during Step 4, Analyze and Report Results, to assess the extent to which the plan was executed as intended and the extent to which the targets for a given phase of the development were met (as reported in the M&E Reporting Template).

✓ **Organizational or grantee alignment.** The M&E Checklist can also be used to align goals and objectives for the M&E work across an organization and its funder, when applicable. For funders working with multiple organizations, the M&E Checklist also promotes continuity across M&E Plans, allowing for streamlined review, improved understanding, and cross-solution comparisons**.**

In each phase, the checklist includes the following:

- **Key assumptions.** The activities organizations should have completed or targets they should have achieved before entering the current phase. If your organization did not complete the activities described in the key assumptions, consider starting at an earlier phase.
- **Reflection questions.** The questions that organizations can ask themselves to help them revisit their assumptions, center equity in their work, and plan next steps.
- **Principles.** Focus areas that guide the work across all phases. The principles include equity and community voice, program articulation, implementation, outcomes, scalability, and knowledge sharing.
- **Planning and execution activities.** The activities organizations should plan for and then complete before exiting the phase. Although organizations may plan for and execute *some* activities within a phase at first, all activities should be completed before exiting the phase.
- **Checkpoints.** Prompts for organizations to pause and reflect on learnings to-date to inform improvements to the solution design and updates to the M&E Plan. At each checkpoint, organizations can review the findings to determine whether to advance to the next phase, continue iterating in the same phase, or return to an earlier phase.

Phase 1: Design the Solution

The goal of Phase 1 is to develop a solution based on a well-defined theory of change for how that solution is expected to lead to improved outcomes for students (or teachers) in a priority community.

Before entering Phase 1, your organization should already have partnered with a defined priority community to identify the problem they hope to solve during Phase 1. During Phase 1, organizations and stakeholders from the priority community work together to unpack the problem and co-design a solution. By the end of Phase 1, the solution should have a well-defined theory of change that is developed in partnership with the priority community.

Key Assumptions. Before beginning activities in Phase 1, organizations should have completed the following activities:

- ✓ Partnered with a priority community to identify the problem you hope to co-design a solution for
- ✓ Secured buy-in from stakeholders, organizational leaders, and implementors

As a fictitious illustrative example, before entering Phase 1, an organization and priority community might jointly decide to solve the problem of:

- Chronic absenteeism in its school, or
- Interrupted learning due to COVID-19, or
- Low math scores

Equity and community voice activities are central to the evidence-building process and are integrated throughout this checklist.

When organizations partner with communities and include the voices and interests of the community in designing the solution and planning and executing the evaluation, both the solution and the evaluation will be more relevant and meaningful to the priority community and are more likely to be successful. Activities associated with equity and community voice focus on identifying stakeholders from the priority community who will collaborate and partner with your organization to plan and execute all activities in each phase. Stakeholders can also help organizations identify the best ways to engage and learn from the priority community in each phase.

How are you planning to use this checklist?

Select one:

☐ **Planning.** Make a plan for how you will complete these activities.

☐ **Execution.** Confirm that the activities were completed.

Principle: **Equity and Community Voice**

Solutions are designed, improved, and tested in collaboration with stakeholders from the priority community.

Planning and execution activities	**Notes**

Organizations should plan for and complete the following tasks in Phase 1.
 	
 ☐ Clearly and <u>narrowly define</u> the <u>priority community</u> and specify the intended <u>solution users</u>.
 	
 ☐ Identify <u>stakeholders</u> in the priority community and partner with them throughout this phase to:
 	
   – Unpack the problem
 	
   – Design a solution, including developing a <u>well-defined theory of change</u>
 	
   – Understand the <u>implementation context</u>
 	
   – Identify outcomes meaningful to the priority community	

Principle: Equity and Community Voice

Reflection questions

1. Whose voices should be included in designing the solution? Whose voices will not be included? How do you plan to include and value the lived experiences of students, teachers, or other stakeholders from the priority community when designing the solution (and in later phases – planning and executing the evaluation)?

2. Have you considered the power and privilege you (as an organization, researcher, or funder) bring to this process? How will you prioritize the voices of stakeholders with less power or privilege? How are you acknowledging and redistributing your power and privilege throughout the activities in this phase?

3. What biases do you have about the priority community, and how might those biases influence how you plan for and execute the activities in this phase? How can the problem be defined in an asset-based way that focuses on community aspirations and contributions?

Checkpoint

Before continuing with the activities in Phase 1, organization establishes a partnership with a priority community that is interested in completing Phase 1 activities. Review the Culturally Responsive Evaluation Resource Guide for additional resources and guidance on how to engage stakeholders throughout solution design, refinement, and testing.

Principle: Equity and Community Voice

Principle: **Program Articulation**

Solutions are well-articulated and continuously refined.

Planning and execution activities	Notes

☐ **Identify the problem:**
 	
  ☐ Unpack the identified problem by describing the root causes of the problem, including how inequality and structural racism contributed to the problem.
 	
  ☐ If known, describe how existing or previous solutions to the identified problem were successful or unsuccessful in the priority community.
 	
☐ **Design the solution:**
 	
  ☐ Identify community assets, strengths, and needs related to the identified problem.
 	
  ☐ Design a solution and describe rationale for its design and need.
 	
  ☐ Describe how the proposed solution differs from existing solutions to the problem and improves upon existing practice.
 	
  ☐ Produce a well-defined theory of change. Include the solution's:
 	
    ☐ Activities and strategies
 	
    ☐ Outputs
 	
    ☐ Short-term and long-term outcomes	

Organizations and research partners should collaborate and partner with stakeholders from the priority community to plan and execute all activities.

Reflection questions

1. How does the proposed solution address the problem previously defined with the priority community? Does the solution address root causes of the problem? Does the solution reflect an understanding of the causes of inequality and structural racism?

2. Is the solution informed by and aligned with the needs and interests of the priority community within this solution context?

3. Does the solution make use of community assets or build on community knowledge and experience? For example, has the community tried to implement any solutions to address the identified problem in the past? Why did those previous initiatives succeed or fail?

4. Who will benefit from the proposed solution, and how will they benefit from it? Will this solution cause any harm?

Checkpoint

Organizations should develop a solution and well-defined theory of change that addresses the problem the priority community has identified before proceeding to Phase 2.

Principle: Program Articulation

☐ Planning   ☐ Execution

Principle: **Implementation**

Solutions account for implementation context and are successfully implemented in the priority community.

Planning and execution activities	Notes
☐ Describe the intended implementation context, which includes the people or human-centered context as well as the technical or structural context. ☐ Identify anticipated facilitators and barriers to implementation and describe how the solution design accounts for them. ☐ Describe in narrative form a plan for how the solution should be implemented in the priority community, accounting for the implementation context. ☐ Identify outputs that are meaningful to the priority community.	

Organizations and research partners should collaborate and partner with stakeholders from the priority community to plan and execute all activities.

Principle: Implementation

💡 **Reflection questions**

1. How does the history of the priority community, including structural racism, affect how the priority community might accept or reject the proposed solution? How will your organization work to develop trust between yourself and implementors?

2. How has oppression on the basis of race and ethnicity, immigration status, sexual orientation, and socioeconomics, among other characteristics, created barriers to using the solution?

3. In the past, what has made it easier for the priority community to embrace new programs or practices? What has hindered the adoption of new programs or practices? To what extent does this solution align or integrate with current practices in the priority community?

4. Are the outputs identified in the theory of change meaningful to the priority community?

Principle: Implementation

Principle: **Outcomes**

Solutions generate evidence of improving outcomes for students and their teachers.

Planning and execution activities	**Notes**
☐ Identify <u>outcomes</u> that are meaningful to the priority community. ☐ Use existing <u>evidence</u>, where available, to justify expected outcomes.	

Organizations and research partners should collaborate and partner with stakeholders from the priority community to plan and execute all activities.

Reflection questions

1. Are the <u>short-term outcomes</u> and <u>long-term outcomes</u> identified in the theory of change meaningful to the priority community?

2. How will you reach consensus if the priority community identifies outcomes different from those your organization, researcher, or funder identifies?

3. What prior research or evidence exists to support the outcomes you hope to achieve?

Principle: Outcomes

☐ Planning   ☐ Execution

Principle: **Scalability**

Solutions can be expanded, replicated, and adapted to improve outcomes for more students.

Planning and execution activities	Notes
☐ Document the incidence of the identified problem in broader context. ☐ Describe how the anticipated facilitators, as well as any anticipated barriers, may help or hinder the solution's take-up beyond the priority community. ☐ List the types of alternative solutions available to address the identified problem.	

Organizations and research partners should collaborate and partner with stakeholders from the priority community to plan and execute all activities.

Reflection questions

1. How widespread is the problem beyond your defined priority community? Are there other similar solutions available in the market, and if so, what are they? How many are there?

2. Does the solution have features that will be difficult to expand, replicate, or adapt beyond the current site?

3. Do you have concerns about the cost of the solution? Who will bear the cost of the solution?

☐ Planning   ☐ Execution

Principle: **Knowledge Sharing**

Presentation of research findings is easy to understand and is shared with others including the priority community.

Planning and execution activities	Notes
☐ Share Phase 1 learnings, including how this information will be used to inform the solution design, in accessible ways with the priority community.	

Organizations and research partners should collaborate and partner with stakeholders from the priority community to plan and execute all activities.

Reflection questions

1. How will you share what you learned in ways that are nontechnical and accessible to the priority community and relevant to their cultural context?

2. If you hold a meeting to share findings, have you given stakeholders enough notice? Is the time, location, and format of the meeting convenient for stakeholders, including parents?

3. Are there ways to partner with stakeholders to interpret, analyze, and present findings?

Principle: Knowledge Sharing

Acknowledgments