



Evaluation Design Matrix

Writing Researchable Questions in Designing Evaluations

This package contains a template of a design matrix, instructions for each component of the matrix, and a primer on how to write researchable questions. These tools were tailored for the U. S. Department of State using the design matrix package of the Government Accountability Office.



[Program or Project Title Here]

Issue or Problem Statement: What do you want to know about the program, project or activity to be evaluated? Why is it important? Describe why you want to evaluate it, providing context. Address the nature of the issue, stakeholders and report users. Create a new row for each question.

| Evaluation Questions | Information Required and Sources | Scope and Methodology | Limitations | What will this analysis likely allow us to say? |
|--|---|--|---|---|
| <p>Identify questions that will address the objectives.</p> <p>Ensure each question is specific, objective, neutral, measure-able, and doable.</p> <p>Make sure key terms are defined.</p> | <p>Identify documents or other types of information the team must have in order to answer the questions.</p> <p>Identify primary and secondary sources of required information, including data bases, studies, key informants, models and others.</p> | <p>Describe the strategies for collecting the information: data bases, interviews, surveys, random samples, case studies, focus groups, or other.</p> <p>Describe the scope of each strategy, including timeframe, location, sample size.</p> <p>Describe any analytical techniques to be used, such as case study summaries, content analysis, descriptive analysis, modeling or cost-benefit analysis.</p> | <p>Describe limitations the team might encounter in answering this question.</p> <p>Will data be reliable?</p> <p>Will the team be able to access the data?</p> <p>Will there be security restrictions?</p> <p>Will the data allow you to generalize findings to the larger evaluation?</p> | <p>Describe what you can likely say to answer the question posed in column one.</p> |

As with all evaluations, questions should reflect stakeholder priorities, be answerable on the basis of evidence and feasible given time, conditions on the ground and resources. They should also grow from the objectives of the evaluation.



Hints for Using the Design Matrix Tool

Issue or Problem Statement: this is a concise presentation of the need for the evaluation and what you want to get out of it.

Evaluation Questions: The questions, following from the problem statement. What do you need to know based on the stated problem or issue?

- Ask questions in logical sequence. Think about the story your evaluation might tell.
- Use terms that can be defined and measured.
- Ask only one question in a sentence. Keep the questions simple.
- Be clear. Focus and narrow the questions.
- Typically questions will ask 1) for a condition to be described (descriptive); 2) for a condition to be compared to criteria, best practices, or other norms (normative); for an estimate of the effect of a program, project, activity or action on a particular outcome (impact or outcome); or an estimate of the likely effect of a proposed action (prospective).
- Avoid yes or no questions. Suggested ways to begin questions include *What, How, and To what extent*.

Information Required and Sources: These are the knowledge, facts, or materials that are needed to answer the evaluation questions. Clearly identify the data needed and where it can be obtained. Information sources can be people, files, reports, studies, data bases, media reports and more. For example:

- Program/project plans
- Project monitoring reports
- Demographic or other data from X data base or at Y link
- Laws, regulations or requirements governing the project
- Studies
- Opinions of key informants, participants, or officials on targeted issues.

Scope and Methodology: What is the overall approach to answering the questions? For each question, specify:

- Data to be collected.
- Time period and geographic area covered.
- Types of samples (selected, random, stratified) if appropriate.



- Method of collection: database, synthesis, interviews, literature review, etc. Words to use to identify methods include compile, complete, conduct, contact, develop, examine, observe, request, review, search, survey.
- Strategy: case study, management review, mail or internet survey, comparative analysis, focus group, personal, telephone, or group interview, observation of process, etc.
- Data analysis methods, such as qualitative, quantitative, mixed. Words to help identify methods include compare, compare and contrast, perform, summarize, synthesize, and tabulate.

Limitations: What effects will the scope and methodology have on the ability to answer the evaluation questions? There are always limitations, so it is best to anticipate and identify them. It may be necessary to have a mitigation plan. Examples of limitations are:

- Staffing or travel considerations
- Inability to access particular data sets, records or sources
- Possible data quality or reliability issues
- Lack of baseline data
- Lack of specificity with data
- Inability to generalize the data or apply it to a larger issue or population

What the Analysis Will Allow Us To Say: Indicate how the data analysis will answer the questions. Answers from survey questions or literature/desk reviews will allow more precise statements, while open-ended questions will provide contextual information. For instance, “the team will be able to describe, delineate, identify” some aspect of the issue the question is addressing. Do not restate the question as a finding. If appropriate, state what the analysis will not answer. For example:

Question: What conclusions can be drawn from the research literature on the effectiveness of programs to prevent gender-based violence?

What the analysis will allow us to say: We will be able to discuss and summarize the state of research into GBV prevention programs, including identifying successes and challenges programs confront. We should be able to identify whether there are methodological weaknesses in the studies and whether any are generalizable to larger populations. Methodological weaknesses may impede our ability to draw conclusions about larger program effectiveness.



Writing Researchable Evaluation Questions

Writing questions that are researchable and ultimately useful is the core of an evaluation. Researchable questions serve a threefold purpose. They:

- Focus the evaluation, increasing accuracy and objectivity
- Guide the work, adding clarity to the final report
- Authenticate the work

Begin by analyzing the issue or problem statement to see what questions need to be addressed. What information do you want from the evaluation and how do you intend to use it? In formulating researchable questions, you will need to consider:

- Evaluation objectives and use
- Available time and funding
- Scope and quality

Using the objectives and the problem statement to help formulate questions helps establish the underlying logic of the evaluation, creates manageable research segments, guides the job's design, and structures the report. Questions need to be answerable within the schedule of the evaluation and its budget. To define an evaluation's scope and ensure its completeness, questions need to be well-defined, answerable with empirical data, and meet the information needs of the bureau or office contracting for the work. The scope should also be linked to the evaluation objectives and the questions. Working across the design matrix and filling out each column for every question will help teams realize whether individual questions are answerable and whether the whole set of questions is answerable given time and budget.

What are Researchable Questions? Researchable questions are:

- Clear and specific
- Objective
- Include terms that can be defined and measured, and
- Collectively address the purpose of the evaluation.

Consider whether the evaluator will be able to collect sufficient, objective evidence to answer each question. This means they will have access to necessary data sources, including baseline data if the question is looking at outcome or impact. Without access to certain documents or key informants, even some types of performance questions may be difficult to answer thoroughly. Questions about efficiency



are not answerable without information on inputs and a project cannot be deemed successful unless that term is clearly defined for research purposes.

To be clear and specific questions should be focused. For example:

Broad: Are ASEAN member states using uniform processes to operate their National Single Windows?

Specific: To what extent are ASEAN member states' National Single Windows harmonized with each other and with the WTO TFA definition of a single window?

Defining and measuring terms is also important. For example:

Undefined: Are the current interventions sustainable?

Better defined: What objectives addressed by the intervention require ongoing support and why?

In this case, you do not want the evaluator to decide what you mean by sustainable. Likewise, other terms like *safe*, *effective*, and even *monitor* require clear definitions and standards for how they will be measured. These terms can be defined in a section of the proposal or after the question in which they were used.

Not researchable (within reasonable time and cost parameters): What is the status of food programs in refugee camps resulting from the Syrian conflict?

Researchable: What food delivery methods reach the largest number of refugees in the two largest camps resulting from the Syrian conflict?

Identifying Scope and Time Period

Answering a question effectively often imposes a particular scope or time period on an evaluation that should be identified. For instance, identifying the scope may involve specifying demographic groups to be surveyed or geographic areas to be covered. Identifying the time covered by a question also determines who holds the information needed. Does the question refer to the past? How far back? The present? When an activity ends?

Identifying the Type of Questions Being Asked

Once the team has identified key terms, scope, and time periods, it should look at the types of questions it has asked. Typically questions will ask 1) for a condition to be described (descriptive); 2) for a condition to be compared to criteria, best practices, or other norms (normative); 3) for an estimate of the effect of a program, project, activity or action on a particular outcome (impact or outcome); or 4) for an estimate of the likely effect of a proposed action (prospective).

Examples of the types of questions are:



Descriptive: How many people has the program served over the past twelve months? How do the components of the program work together?

Normative: Was the project implemented according to plan? Is the program operating within its budget and timelines?

Impact Questions: What factors affect the differences in cost among food relief operations in three refugee camps in Country X? What changes in attitude toward local government have come about as a result of the training series implemented by Grantee X?

Prospective: What cost savings will likely emerge from the proposed lighting standards for domestic buildings? (For prospective questions, assumptions about processes, steps or how a system works are critical and must be transparent so those who question the conclusion can see whether it depended on another assumption.)

Identifying the type of questions being asked helps the team decide on the right approach and methodology. They may discover, for example, that a question requires a more complex methodology—and thus more time and resources—than anticipated. If a team has written a question it cannot answer accurately within the necessary cost and time, it must rewrite the question. This is the place where quality, cost and time merge.