

Collecting data: How to plan & conduct direct observation

Why choose direct observation to collect data?

Direct observation is the collection of information using your senses. By observing, you can document activities, behavior, and physical aspects of a situation without having to depend on peoples' willingness or ability to respond accurately to questions. Observation is useful when:

- You are trying to understand an ongoing process or behavior, or an unfolding situation or event.
- There is physical evidence, or products or outcomes that can be seen.
- Written or other data collection methods seem inappropriate.
- Observation can occur in public situations, such as observing peoples' participation in a training or documenting how people use a community garden. Observation can also occur in more private settings like observing a patient visit in a clinic.

OBSERVATION TOOL OVERVIEW

PLANNING

- Decide who, what & when
- Focus
- Select format & type
- Develop a tool
- Identify & train observers

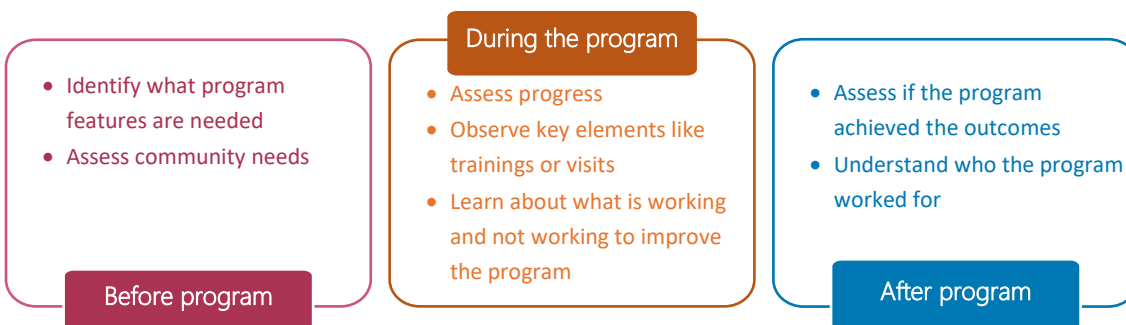
COLLECTING DATA

- Use the tips
- Key follow up steps

Planning observation

□ Did you determine who, what and when you will observe?

The first step in planning your observation is to decide who and what to observe. Typically in evaluation, observation is used to assess the effectiveness of encounters, meetings, trainings or other interactive activities. The timing for doing your observations depends on what you want to learn about. You may only need to observe once, close to the main intervention point of the work or it may be useful to observe multiple meetings or events over time to detect changes.



Other key considerations:

- If possible, observe multiple events/encounters and make sure the event, group or people you observe are a good representation of the people who usually participate. This will help to reduce the likelihood of bias in your observation.
- It is common practice to observe the most successful sites or the most convenient people. If this is your approach, it is important not to suggest that they represent the whole population.
- Did you identify the specific things you will be observing?
- After you have identified what or whom you will observe, you need to focus your observation. It is impossible to observe everything that occurs during an event or encounter, so determine what information is most important. Table 1 summarizes components to observe.

Components to observe		
Characteristics	Leaders/ presenters	Interactions
<ul style="list-style-type: none"> • Demographics • Attitudes toward subject, others, or self • Skill and knowledge levels • Statements about commitments and values 	<ul style="list-style-type: none"> • Clarity of communication • Facilitation skills • Flexibility • Knowledge of subject • Organization of training/ meeting • Use of materials, learning techniques 	<ul style="list-style-type: none"> • Level of participation and interest • Power relationships and group dynamics • Level of learning and problem-solving • Levels of support and/or feelings on specific issues
Non-verbal behavior	Physical surroundings	Products of a program
<ul style="list-style-type: none"> • Facial expressions • Gestures • Posture • Use of physical surroundings 	<ul style="list-style-type: none"> • The room (e.g., space, comfort, suitability) • Amenities • Seating arrangements • Built environment (e.g., bike lanes, grocery stores) 	<ul style="list-style-type: none"> • Demonstrations, plans • Brochures, manuals, newsletters

Table adapted from materials produced by University of Wisconsin–Extension: Program Development and Evaluation. <http://fyi.uwex.edu/programdevelopment/>

Finally, you must determine whether or not you will tell people they are being observed, as people may act differently when they know they are being watched.

- It is essential to inform people and obtain their permission for observation in some cases (e.g., observing a patient’s physical therapy session)
- If your observations take place in public (e.g., documenting how people use a community garden) you may not need to inform people. However, if participants are not told, make sure the information being collected is not sensitive and that there is no risk of harm.

□ Did you decide which kind of observation format to use: structured or unstructured?

When planning any data collection activity, it is important to consider what your stakeholders will view as useful and credible information. For observation, this will influence what you observe and who performs the observation. Being thoughtful and systematic upfront will help to ensure credibility.

One important consideration is whether to conduct structured or unstructured observations (see the table below for examples and considerations). It may be beneficial to develop an observation guide that combines a structured and an unstructured approach (see the “keeping track of your observations” section below for examples). Observing what does not happen may be just as important as observing what does.

	Examples	Considerations
Structured observation <ul style="list-style-type: none">• Focuses on observing characteristics or features that provide information about the things you need to learn about, your indicators. Often these are things you can count or systematically describe.	<ul style="list-style-type: none">• Total number of people at the community garden• Numbers of people at the garden by attribute (e.g., sex, age)• Numbers of people participating in different components of the garden	<ul style="list-style-type: none">• Requires a detailed guide or checklist that lists each piece of information required• Provides quantitative data from frequency counts, rankings and ratings• Used for standardized information and a numerical summary
Unstructured observation <ul style="list-style-type: none">• Looks at people, activities or physical features as they naturally exist. This should relate to your evaluation questions, but is not confined to a pre-set list of items	<ul style="list-style-type: none">• Go to the community garden and write down everything you see, hear, touch, smell, and taste	<ul style="list-style-type: none">• Is inclusive and describes things within a participant’s context• More likely to pick up on things you may not have thought about in advance• Provides qualitative data

□ Did you develop a tool to record your observations?

Observations must be recorded to be credible for evaluation purposes. You’ll need to create a tool that captures:

- The date, location and a short description of the context in which the observation occurred.
- The components you chose to focus on with the format you selected (structured or unstructured).

There are lots of ways to do this depending on the time, resources, and the number of observations you’ll be doing. Before developing your tool for keeping track of observational data, try to identify if there is an existing tool you could adapt or modify.

Any of the following methods can be used in combination to record your observations:

- Observation guides: Printed forms that provide space for observations. The more structured the guide (i.e., the more specific it is about the things being looked for), the easier it will be to analyze results, but this will also limit opportunities to document unexpected observations. Guides are particularly helpful when multiple people are conducting the observations.
- Recording sheets or checklists: Printed forms where observations can be recorded with yes or no (e.g., present or not present) or on a rating scale to indicate the extent or quality of something. Use checklists when there are specific actions or attributes to be observed.
- Field notes: Recorded observations in a narrative or descriptive style. This is the least structured approach to recording observations.
- Pictures: Photos and videos. Note: If you are taking photos or videos with people, you may need to have them sign release forms.

□ Did you identify and train observers?

Observation, even when guided by a checklist, can be the most complicated data collection method for which to train observers. This is because you are generally asking them to record not only what people are saying, but other dynamics that may influence the discussion (e.g., the environment, the emotion, the level of engagement, etc.)

An observer can be either a participant or strictly a neutral observer. While the objectivity of an outside observer can be valuable, a participant has familiarity with the program and may be able to offer more insight about the group.

It is difficult for any one person to capture everything that is going on in a room or other setting, so it is useful to have more than one observer present to make sure the observation is complete and to minimize individual bias. When more than one observer is involved, it is important to make sure there is a common understanding of the checklist items so that they are capturing the same data.

Collecting observation data

□ Did you pay attention to these key tips when conducting direct observation?

Observing an event/encounter in sufficient detail is challenging—you have to be paying attention to everything. If possible, it can be useful to have a team of people conducting the observation to provide a more complete assessment and to avoid any individual biases. Observation is a learned skill that can be strengthened through experience and practice. Observers need to focus on:

- Capturing details of a complex, dynamic situation.
- Discerning what is important to record.
- Interpreting the meaning of what is observed.
- Confirming the findings—this can be done by including different perspectives in the observation (i.e., multiple observers) and/or conducting several observations (e.g., multiple occurrences of events/encounters) before coming up with a conclusion.

□ Did you complete these follow up steps after your observation was complete?

Thank participants. At a minimum, it is important to thank the people that helped make the observations possible—the instructors, teachers, practitioners, meeting chairperson—and to inform them of any next steps. If participants knew they were being observed, you may talk to your point of contact to identify an appropriate way to thank them for their participation.

Plan for data analysis. To analyze the data you need to:

- organize the data that you recorded;
- conduct the appropriate level of analysis;
- interpret your findings (i.e., what do the data tell you?); and
- identify limitations of your data collection efforts.

For details on how to do these steps, see the tool *How to Analyze and Interpret Data*. Report back to participants and program planners. When people participate in an evaluation effort, they often like to see the result. You should consider appropriate ways to report back to participants, and determine how the information will be used to help with decision making and program improvement. For details, see the tool *How to Use and Share Results*.

Sources:

University of Wisconsin–Extension: Program Development and Evaluation
<http://fyi.uwex.edu/programdevelopment/>

The Center for Community Health and Evaluation designs and evaluates health-related programs and initiatives throughout the United States.



CCHE's *Measuring What Matters* curriculum is informed by the following resources:

- [Centers for Disease Control and Prevention: A Framework for Program Evaluation](#)
- [University of Wisconsin–Extension: Program Development and Evaluation](#)
- [Northwest Center for Public Health Practice: Data Collection for Program Evaluation \[online course\]](#)