

Evaluation Briefs

Data Collection Methods for Program Evaluation: Observation

No. 16 | updated August 2018

This brief is about observation as a data collection method for evaluation. It includes a basic overview of observation; when to use it; how to plan and conduct it; and its advantages and disadvantages.

What is observation?

Observation is way of gathering data by watching behavior, events, or noting physical characteristics in their natural setting. Observations can be overt (everyone knows they are being observed) or covert (no one knows they are being observed and the observer is concealed). The benefit of covert observation is that people are more likely to behave naturally if they do not know they are being observed. However, you will typically need to conduct overt observations because of ethical problems related to concealing your observation.

Observations can also be either direct or indirect. Direct observation is when you watch interactions, processes, or behaviors as they occur; for example, observing a teacher teaching a lesson from a written curriculum to determine whether they are delivering it with fidelity. Indirect observations are when you watch the results of interactions, processes, or behaviors; for example, measuring the amount of plate waste left by students in a school cafeteria to determine whether a new food is acceptable to them.

When should you use observation for evaluation?

- When you are trying to understand an ongoing process or situation. Through observation you can monitor or watch a process or situation that your are evaluating as it occurs.
- When you are gathering data on individual behaviors or interactions between people.
 Observation allows you to watch peoples' behaviors and interactions directly, or watch for the results of behaviors or interactions.

- When you need to know about a physical setting.
 Seeing the place or environment where something takes place can help increase your understanding of the event, activity, or situation you are evaluating. For example, you can observe whether a classroom or training facility is conducive to learning.
- When data collection from individuals is not a realistic option. If respondents are unwilling or unable to provide data through questionnaires or interviews, observation is a method that requires little from the individuals for whom you need data.

How do you plan for observations?

- **Determine the focus.** Think about the evaluation question(s) you want to answer through observation and select a few areas of focus for your data collection. For example, you may want to know how well an HIV curriculum is being implemented in the classroom. Your focus areas might be interactions between students and teachers, and teachers' knowledge, skills, and behaviors.
- Design a system for data collection. Once you
 have focused your evaluation think about the specific
 items for which you want to collect data and then
 determine how you will collect the information you
 need. There are three primary ways of collecting
 observation data. These three methods can be
 combined to meet your data collection needs.
 - » Recording sheets and checklists are the most standardized way of collecting observation data and include both preset questions and responses. These forms are typically used for collecting data that can be easily described in advance (e.g., topics that might be covered in an HIV prevention lesson).
 - Observation guides list the interactions, processes, or behaviors to be observed with space to record open-ended narrative data.



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- » Field notes are the least standardized way of collecting observation data and do not include preset questions or responses. Field notes are open-ended narrative data that can be written or dictated onto a tape recorder.
- Select the sites. Select an adequate number of sites to help ensure they are representative of the larger population and will provide an understanding of the situation you are observing.
- Select the observers. You may choose to be the only observer or you may want to include others in conducting observations. Stakeholders, other professional staff members, interns and graduate students, and volunteers are potential observers.
- Train the observers. It is critical that the observers are well trained in your data collection process to ensure high quality and consistent data. The level of training will vary based on the complexity of the data collection and the individual capabilities of the observers.
- Time your observations appropriately. Programs
 and processes typically follow a sequence of events.
 It is critical that you schedule your observations so
 you are observing the components of the activity that
 will answer your evaluation questions. This requires
 advance planning.

What are the advantages of observation?

- Collect data where and when an event or activity is occurring.
- Does not rely on people's willingness or ability to provide information.
- Allows you to directly see what people do rather than relying on what people say they did.

What are the disadvantages of observation?

- Susceptible to observer bias.
- Susceptible to the "hawthorne effect," that is, people usually perform better when they know they are being observed, although indirect observation may decrease this problem.
- Can be expensive and time-consuming compared to other data collection methods.
- Does not increase your understanding of why people behave as they do.

Resources

Taylor-Powell E, Steele S. *Collecting Evaluation Data: Direct Observation.* University of Wisconsin Cooperative Extension. 1996.

Available at http://learningstore.uwex.edu/assets/pdfs/g3658-5.PDF

Performance Evaluation and Monitoring TIPS. *No. 4:* Using Direct Observation Techniques. USAID Center for Development Information and Evaluation. 1996.

Available at https://pdf.usaid.gov/pdf docs/pnaby209.
pdf docs/pnaby209.

Section 6: *Direct Observation and Photovoice (Rapid Appraisal)*. UCLA Center for Health Policy and Research.

Available at: http://healthpolicy.ucla.edu/programs/health-data/trainings/Documents/tw_cba25.pdf

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Available at: https://www.cdc.gov/healthyyouth/evaluation/pdf/brief16.pdf

For further information or assistance, contact the Evaluation Research Team at ert@cdc.gov. You can also contact us via our website: http://www.cdc.gov/healthyyouth/evaluation/index.htm.