Program Evaluation Toolkit
Module 6, Chapter 2: Observations

Regional Educational Laboratory Central

From the National Center for Education Evaluation at IES

Speaker 1:

Welcome to the second chapter of module 6. In this chapter, you will review the purposes of observations and best practices in conducting them.

Observations are useful for collecting information about processes, situations, interactions, behaviors, physical environments, or characteristics of individuals or groups in real-life settings. Observations may be used as complementary data to confirm or challenge perceptions gathered from other data collection methods. For example, if you need to collect data to answer an evaluation question related to implementation of a program, you may directly observe implementation in addition to gathering perceptions of implementation through interviews, focus groups, or surveys, which all rely on self-report. You can also conduct observations when other data collection procedures, such as interviews, focus groups, or surveys, are not feasible.

The *Guidelines for Observations*, available on the resources page of the website, provides helpful steps for conducting observations that will be outlined in this chapter.

Depending on what you plan to observe, you may be able to use existing observation instruments that demonstrate reliability and validity to answer your evaluation questions. The handout *Existing Observation and Survey Instruments*, on the resources page of the website, provides references and brief descriptions of existing instruments that may be useful in the scope of your evaluation.

As for interviews and focus groups, first identify the evaluation question or questions that can best be answered through observations. Just like with interviews and focus groups, not every evaluation question lends itself to being answered through data collected from observations. For example, a question about how useful participants perceive a program to be might be best answered through an interview or focus group. But a question about how many students attended AMMP! could be answered through observation.

After you identify evaluation questions, decide what you want to look for in observations. For instance, you might look for interactions, nonverbal behavior, evidence of implementation, actions of program presenters, physical surroundings, or products of a program. What you observe depends on the evaluation question or questions you wish to answer. In the AMMP! example, the evaluation team might want to look for how many students attended AMMP! and what barriers exist that prevent AMMP! participants from completing homework. The team could observe students' behaviors or comments during AMMP!.

For examples of each of these, refer to the handout *Guidelines for Observations*, found on the resources page of the website.

Think about the approach you will use to collect your observation data. A few examples are recording checklists, observation guides, and open field notes. Recording checklists are standardized forms, with preset questions and responses, for observing specific behaviors or processes. Observation guides are forms that list behaviors or processes to observe, with space to record open-ended data. Open field notes are a flexible way to document observations in narrative form. While recording checklists and observation guides are useful when looking for specific behaviors or processes, open field notes are useful when the observer is not sure which behaviors or processes are important to capture to answer the evaluation question or questions.

In the AMMP! example, the evaluation team wants to answer the AMMP! evaluation question "What barriers exist that prevent AMMP! participants from completing homework?" The evaluation team wants to observe specific students' behaviors or comments that might indicate barriers to completing their homework as well as the tutor's responses during AMMP! so the team creates an observation guide. The team also wants to check off any behaviors observed in the barrier checklist, such as missing supplies and distracted by peers, so the team also creates a recording checklist. Refer to the handout *AMMP! Observation Protocol,* found on the resources page of the website, to review this example.

Next, decide whether your observations will be controlled or natural. Controlled observations are conducted in structured and arranged settings. They are usually overt, meaning that observers make their presence known. For example, you might invite a group of children into a room arranged with toys and then observe their interactions. Natural observations, on the other hand, are conducted in unstructured and real-life settings. They can be overt or covert, meaning that observers either let participants know they are being observed or inconspicuously remain in the environment. For example, you might observe children during recess for bullying behaviors.

In the AMMP! example, the AMMP! evaluation team wants to observe students during AMMP! tutoring sessions. This would be an example of a natural observation because the AMMP! tutoring session would occur with or without the instance of an observation. The observers let tutors and students know that they will be observing the session.

Participants may change their behavior in an observer's presence. *Ecological validity* refers to the extent to which the results of a study are generalizable to real-life settings. If ecological validity is important in your evaluation, consider conducting covert observations. Whether you conduct overt or covert observations, always consider ethical issues and consent procedures, such as the privacy of those you are observing. The *Guidelines for Observations*, available on the resources page of the website, includes references that explore ethical considerations in greater depth.

Next, determine when and how frequently you will conduct observations. Taking action or making a decision after only a single observation can be misguided, so consider the number of observations needed. For example, the AMMP! evaluation team needs to observe AMMP! participants at least three to five times to get a clear idea of barriers to completing their homework. Also determine how long your observations will be. Observations should be long enough to capture the beginning, middle, and end of what you are interested in observing, whether it is playtime, program implementation, or a lesson. Participants' behaviors may change

during the entire time frame. For example, the evaluation team will observe the entire AMMP! tutoring session each observation to capture the whole session. Also consider whether the time of day, week, season, or year will influence your findings. It may be important to vary the times of different observations to account for these. For example, the evaluation team should observe AMMP! tutoring sessions at the beginning, middle, and end of the school year to capture barriers that may change over time. It is possible that AMMP! participants are more unfamiliar with the content at the beginning of the school year but struggle more with peer distractions later in the school year. This would be captured by observing throughout the school year.

The next step is selecting where you will conduct observations. It is important to select enough observation sites so that the data are representative of the target population. This step is related to sampling, which you can review in module 4. For example, the AMMP! evaluation team wants to answer the AMMP! evaluation question "How many students attended AMMP! each month?" This could involve recreational activities, field trips, tutoring, or math extension activities so the evaluation team would need to observe all AMMP! activities to be able to answer this question through observations.

The observation protocol should include information from steps 1 through 6. First, include the evaluation question or questions you want to answer so that observers know the purpose of the observations. Include information about items to observe, the data collection approach to use (recording checklist, observation guide, or open field notes), and the type of observation (controlled or natural, overt or covert). Also include directions related to the approximate timing of the observations and the use of the data collection approach. Provide information about the sites for the observations. An example *AMMP! Observation Protocol* is available on the resources page of the website.

Potential observers include stakeholders, other professionals, program participants, graduate students, and interns. Consider whether you need one or more observers. Train observers on the observation protocol to ensure that they understand the protocol and can apply it consistently across observations. Include practice observations in the training so that observers can use the protocol and compare notes to ensure calibration. If the observation protocol includes a rating scale, make sure that observers clearly understand each level of the scale.

After you complete steps 1 through 8, you are ready to conduct the observations. As with interviews and focus groups, consider audio- or video-recording the observations. If recording is not possible, taking good notes is especially important. It may also be a good idea to have multiple observers present at an observation so that they can discuss and reach consensus about any uncertainties that arise.

The *AMMP! Observation Protocol* is available on the resources page of the website. Review module 1 for a description of AMMP! if you are unfamiliar with this fictitious after-school math program. This protocol is designed to guide and record observations that answer the evaluation questions "What barriers exist that prevent AMMP! participants from completing homework?" and "How many students attended AMMP! each month?"

For a list of existing instruments, you might draw from the *Existing Observation and Survey Instruments* handout, found on the resources page of the website.

This concludes the chapter on observations. Chapter 3 of this module covers surveys.