

Speaker 1:

Welcome to the third chapter of module 6. In this chapter, you will learn about surveys and review the steps for developing them. At the conclusion of this chapter, you will apply what you have learned about data collection instruments to developing your own instrument to answer an evaluation question.

Surveys are a useful and often inexpensive way to collect data about the characteristics of a sample in an evaluation. These characteristics might include behaviors; practices; skills; goals; intentions; aspirations; and perceptions of knowledge, skills, or behavior. Surveys can gather a large amount of data in a relatively short period. Surveys include a fixed set of questions. *An Educator's Guide to Questionnaire Development*, available on the resources page of the website, describes a process for developing surveys. This helpful resource will be referenced throughout this chapter.

For your evaluation, you may be able to use an existing survey instrument that demonstrates reliability and validity. However, whether you can use an existing instrument depends on the evaluation questions you plan to answer through a survey. The handout *Existing Observation and Survey Instruments*, available on the resources page of the website, provides brief descriptions and links to existing instruments. If an existing instrument does not meet your evaluation needs, you will need to create your own survey. The following steps outline a process for developing your own survey instrument.

The first step in survey development involves identifying the evaluation question or questions you want to address through the survey. Think about evaluation questions for which you do not already have data. Determine if these evaluation questions can be addressed with a fixed set of survey questions. Also consider whether recipients will be able to complete the survey on their own, unlike an interview or focus group in which a facilitator can guide discussion.

Next, determine what you are measuring. There are two kinds of variables you might measure in a survey. Observable or measured variables include behaviors, practices, and skills.

Unobservable or latent variables include goals; intentions; aspirations; and perceptions of knowledge, skills, or behavior. What you are measuring informs the types of survey questions you will ask as well as the response options associated with those questions.

When you draft survey questions, decide whether open-ended or closed-ended questions, or a combination of both, are best suited to collecting the data you need to answer your evaluation questions. Open-ended questions do not include fixed responses or scales but allow participants to add information in their own words. Unobservable variables are often, but not always, measured using open-ended questions. Even though responses are open-ended, they may still be

quantifiable. You can code responses according to categories and count the number that fall into each category. For example, the AMMP! evaluation team wants to answer the evaluation question “What barriers exist that prevent AMMP! participants from completing homework?” The evaluation team may want to include an open-ended question in a parent perception survey asking parents what the most difficult thing about math homework is. In this case, the team could code the responses in several categories. Two examples might be, students have too many responsibilities and students are too tired.

Open-ended questions have several advantages. They are straightforward to design, ensure that respondents are not influenced by response categories, and provide rich, in-depth information. They may also indicate the importance of certain issues in a survey. Including open-ended questions may help you collect more meaningful information because respondents can provide detailed responses. However, surveys with too many open-ended questions could overburden respondents and contribute to lower response rates.

Closed-ended questions include fixed responses such as yes or no, true or false, multiple choice, multiple selection, or rating scales. Observable variables are often, but not always, measured using closed-ended questions. For example, on the survey for AMMP! parents, the evaluation team includes the question “How often did your student complete their math homework in the last two weeks” along with a rating scale of never, rarely, sometimes, often, and always. Parents respond to the statement by selecting one option on the rating scale.

Closed-ended questions also have several advantages. They are straightforward to process and code, with less room for error. They limit irrelevant or vague information, which you may find in responses to open-ended questions. Closed-ended questions also place a lower burden on respondents and may contribute to higher response rates.

If you decide to include closed-ended questions on your survey, choose which type of scale to use for responses. If you want to know whether a certain characteristic or phenomenon exists, consider using a yes/no or true/false scale. For example, the AMMP! evaluation team may want to ask parents if they know what the acronym “AMMP!” stands for and include a yes/no scale. If your focus is on agreement, frequency, importance, likelihood, quality, or satisfaction, consider using a rating scale. For example, for the frequency-focused question “how often did your student complete their math homework in the last two weeks?” the team includes the rating scale of never, rarely, sometimes, often, and always. See the handout *Ordered Response Options for Rating Scales*, available on the resources page of the website, for example response options for rating scales.

Also consider how many response options to include for closed-ended questions. It is not recommended to have more than seven response options in a rating scale. Five options are usually sufficient. Limiting the number of options ensures that respondents are not puzzled, for example, by the difference between an 11 and a 12 on a 15-point scale.

Also consider whether a midpoint in a rating scale is necessary. A rating scale with an odd number of response options, such as five, has a midpoint, such as the third option. Respondents can select the midpoint to remain neutral or undecided on a question. However, respondents

might also select the midpoint because it is the easy option and they don't have to consider the other options, as they would have to if there were an even number of response options, like four. If a rating scale has no midpoint, respondents may feel forced to choose an option that does not reflect their true answer. There are arguments both for and against including a midpoint. After careful consideration, choose the number of response options that works best for you and your evaluation needs.

Think about the language you use in your survey questions. Not only should the survey questions be relevant to your evaluation questions, they should also be culturally and developmentally appropriate. Use language that is appropriate for your audience so that they can understand what they are asked. Questions should also be brief and avoid wordiness.

Response options should be mutually exclusive and collectively exhaustive so that respondents can choose only one response. Mutually exclusive means that two response options cannot be true at the same time. For example, if the AMMP! evaluation team asks respondents to indicate the number of times a student participated in the AMMP! in the last two weeks, the team does not include the response options "between one and three times" and "between three and five times" because both response options are true for students who participated three times. Instead, the response options "between one and three times" and "between four and six times" are mutually exclusive. Collectively exhaustive means that the response options include all possible responses to a question. For example, the AMMP! evaluation team does not want to include only the response options "between one and three times" and "between four and six times" in a question about the number of times a student participated in the AMMP! because a student may have participated less than one time and more than six times in two weeks. Instead, the response options might be "never", "between one and three times", "between four and six times", "between seven and nine time", and "every time it was held" to ensure that the team cover all possible responses.

Avoiding double-barreled questions is important. A double-barreled question asks two questions but forces respondents to provide only one answer. For example, the AMMP! evaluation team includes the question "Was the professional development culturally and developmentally appropriate?" on a survey for tutors. This question asks about both the cultural and developmental appropriateness of the professional development, and respondents must answer both at the same time. What if a respondent felt that the professional development was developmentally appropriate but not culturally appropriate? Instead, the question should be split into two questions. When a question includes a conjunction such as "and," "but," or "or," it is often a double-barreled question.

Also avoid loaded questions. A loaded question may lead respondents to answer in a way that does not represent their actual position on the topic or issue. For example, "What do you love about AMMP!?" This question is loaded because of the assumption that all respondents love something about the program. But what if a respondent didn't love anything about the program?

Finally, avoid ambiguous words such as "usually," "often," and "rarely." For example, the AMMP! evaluation team includes the survey question "Do you usually use the tutoring strategies you learn?" However, a respondent may not understand what "usually" means in this question. A

better question would be “Did you use the tutoring strategies you learned?” Rating scales sometimes include such ambiguous words. For example, a question may have a rating scale with the options “almost always,” “often,” “sometimes,” “seldom,” and “never.” These words are appropriate in a scale, but do not use them in the question itself.

By ensuring the language in your survey is clear, you’ll likely increase the response rate because respondents will be able to easily understand and complete the survey.

After you develop clear questions for your survey, decide on a format that optimizes the readability of the survey. Consider visually separating the survey questions, such as using numbering the questions. Also, be sure to include a label for each response option in a rating scale. For example, if a question includes a rating scale from *never* to *always*, do not have unlabeled checkboxes between these two response options, as this might confuse respondents. In addition, you may want to use a consistent question-and-response format across your survey. For example, all response options move in either ascending, such as never to always, or descending order, such as always to never.

Consider your audience when choosing a font size. The font size should be large enough that all respondents can read the survey questions and response options. In general, use at least 12-point font. Also, do not write in all capitals because this may unnecessarily emphasize some parts of the survey over others. Finally, thank respondents for their time at the beginning and end of the survey so that they know that their time is appreciated.

The AMMP! evaluation team decides to survey caregivers of students participating in the program in order to collect data on caregivers’ perceptions of homework completion. An example caregiver perception survey for the AMMP! evaluation is available on the resources page of the website.

The order of survey questions is another important consideration. A survey should start with straightforward questions related to, for example, respondents’ background, experience, or general perceptions. The first few questions should also capture the attention of respondents so that they stay engaged throughout the survey. This is not a simple task. If the first few questions are not engaging, respondents may not complete the survey. Or if the survey starts with difficult questions, respondents may be scared away. Try to put the most important questions at the beginning to collect the most useful information before respondents become fatigued. Then ease into more controversial or challenging topics near the end. But always be sure to arrange your questions in a logical order.

Share relevant information related to the survey in an invitation letter, email, phone call, or at the beginning of your survey instrument with respondents. Explain why the data are being collected so that respondents understand the reason for the questions. Also include information about the approximate time to complete the survey; the confidentiality of results and anonymity of participation; the deadline for completing the survey, if relevant; and contact information for respondents who have questions about the survey or results. When respondents know this important information, they are more likely to complete the survey.

Finally, select a mode for administering the survey. You can use a variety of modes once you develop your questions: collecting phone numbers and calling participants, sending participants a link to an online survey in a text message or email, or printing the survey to mail to participants or administer at meetings. These modes vary in cost, time commitment, and number of staff needed. The modes may also yield different response rates. Survey response rates may be as low as 15 to 40 percent if, for example, the intended participants find it difficult to participate in the mode chosen. However, the National Center for Education Statistics recommends a response rate of at least 85 percent to assume the responses represent the entire population (for example, a school, district, or state). Module 7 presents more information on response rates and their impact on your results. If you conduct a survey by phone, train people on administering the survey to ensure consistent administration, just as you would train interviewers and focus group facilitators.

After completing steps 1 through 10, you are ready to conduct the survey. See the resources page of the website for an example parent survey created for the AMMP! evaluation. The *AMMP! Caregiver Perception Survey* aligns with the evaluation questions “What barriers exist that prevent AMMP! participants from completing homework?” and “How many students attend AMMP! each month?” Remember that these evaluation questions are directly related to the *AMMP! Logic Model* found on the resources page of the website.

Still not sure what data collection method to use in order to answer your evaluation questions? This table may help you decide based on your evaluation needs. For example, an interview is a good choice if you need data from specific individuals; if you need to make sure, in real time, that participants understand your questions; if you have concerns about the literacy skills of your sample; if you need full or very high participation rates from your sample; if you need to ask follow-up questions; or if you are looking for new ideas to emerge. This table is also in the handout *Interview, Focus Group, Observation, or Survey?*, available on the resources page of the website.

Now that you have reviewed the four data collection methods and examined considerations for developing questions, you are ready to draft your own data collection instrument, using any or all of the resources provided in this module. A form for drafting your instrument, titled *Data Collection Instrument Draft*, is available on the resource page of the website.

After you develop a data collection instrument and collect data with the instrument, you are ready to move to the next step of the program evaluation cycle: data analysis. In module 7, you will learn about the procedures for cleaning and analyzing data in program evaluation.