

■ Quality Assurance

As an evaluation tool, observation can be powerful because it provides insight into actual occurrences from an outsider's perspective, rather than from the perspective of a program participant, such as an instructor, student, or stakeholder.

Observations can provide important data for evaluations if

- the observations are consistent;
- the observers are trained to observe and record in the same fashion; and
- the observers are careful to separate what they see from what they think is going on.

Focus Groups

Focus groups are group interviews designed to encourage participants to build on each other's responses. Most of the guidelines for developing interviews are true for focus groups. The questions should be carefully developed, the participants should be purposefully selected, the site should be neutral, and the discussion should be recorded.

Focus groups are useful in evaluations at any stage of a program's development—front-end, formative, and summative—though they are most often used in front-end evaluations. They allow program developers to collect opinions and ideas quickly when little is known about the need for a program. Focus groups are often used to build a survey. The quality of the responses, however, depends on the skill of the moderator and the willingness of the participants to share their views. It is not possible to generalize focus group responses to a larger population, so they are not often used in summative evaluation. In some cases, however, focus groups are used for gaining insight into outcomes achieved through a program (see box 3.8).

Focus groups tend to last from one to two hours and involve six to ten people. They can be a relatively quick and inexpensive way to build a richer understanding. The purpose is not to obtain agreement, but to engage people in exploring their perceptions, feelings, and opinions. Focus groups are good at eliciting experiences and ideas, particularly about a draft program or concept. As a result, they use questions that are open ended and exploratory in nature.

- What would you like to see in a museum like this?
- What are the problems associated with suburban sprawl?
- What bothers you about the environment?
- What would you like to know more about?
- How similar to you is the character in the video?
- Which brochure is most interesting, and what makes it interesting?
- What would make this poster more attractive?

A focus group is not the best tool for every audience. Political leaders, for example, may not wish to participate; young children are apt to become distracted; and adolescents might feel pressure to agree with the most popular

participant. Organizing groups of participants who don't already know each other might be useful, but it will not overcome all of these concerns.

You might be able to attract participants who care enough about your program and its success that an incentive won't be necessary. On the other hand, some folks may need an incentive to give you an hour of their time. Snacks after school, dinner on a weekday, and a \$30 coupon for a local restaurant have been successfully used to entice people to participate.



3.15 APPLICATION EXERCISE

What aspect of your evaluation looks appropriate for a focus group? Go back to your evaluation plan and consider what types of questions could be answered with a group discussion. What broad questions do you want answered through a focus group? If your original plan does not require a focus group, imagine what you might ask a group of stakeholders that would help them generate useful information for improving your program.

■ Question Wording and Sequencing

Focus group questions usually begin with something easy, such as asking people to introduce themselves. This opening question—like “Tell us your name and how long you have been coming to the center”—should make people feel comfortable in the group.

Once participants are at ease, your questions should guide them to focus on the topic. Focusing questions often involve getting participants to describe their experience. You can start with a more general question and then ask questions that require people to be more specific. At that point, encourage sensory details, and ask each person how their experience was similar to or different from another's. You might ask, “How did you first hear of the center?” and “What do you remember about your initial visit?”

The important questions should come next. While you may only have a handful of them (say, three to five), these questions are the essence of your focus group and should take the majority of your time.

- What do you remember about this program?
- Did anything from this experience change your teaching?
- How do you use PLT activities in the classroom?
- What would help you use PLT activities more often?

It is important to follow such questions with prompts that enable you to clarify a comment or explore a bit deeper. You can also ask if others in the group have had similar experiences.

BOX 3.8

Evaluation with a Focus Groups

The Groundwater Foundation used focus groups, among other tools, to help evaluate their Children's Groundwater Festival. The festival attracts over 3,000 students in 4th, 5th, and 6th grades and their teachers. They participate in a variety of 30-minute events throughout the day, but everyone does not participate in the same events. Because the program has attracted classes from the nearby communities for many years, the evaluators were able to develop four different groups: students who attended the most recent festival, students who attended at least one festival three to six years ago, teachers who attended at least one festival, and students from the same schools who did not participate.

Tests of pre- and post-festival knowledge consistently show that students learn about groundwater and its conservation from the festival (increases in scores average 21%). The foundation was particularly interested in exploring how behavior changed as a result of the festival. Focus groups were deemed the best tool to explore this outcome. Students and teachers from 15 schools participated in the study. A total of ten student focus groups with 48 students were held (28 had attended the festival and 20 had not). Each focus group was 30 to 45 minutes long. Fourteen teachers participated.

Students who had attended a festival were asked the following ten questions:

1. How long ago did you attend?
2. Do you remember any one or two particular events that really impressed you?
3. Do you remember anything you did differently as a result of attending, i.e., changes in your habits?
4. Do you continue to do any of those different things?
5. Did your teacher do any special lessons before or after the festival?
6. As you have progressed through junior high and high school, has your interest in the environment increased, decreased, or stayed about the same?
7. What careers would you like to pursue?
8. Do you think what you've learned about the environment will influence your behavior in those careers?
9. What would you suggest to festival organizers that they do differently to improve the environmental protection/conservation behaviors of students who attend?
10. What types of longer term follow-up after the festival would you be interested in?

Students who had not attended were asked slightly different questions:

1. Have you had any classroom lessons on the environment, its protection, and its conservation?
2. What is your sense of environmental protection: do we do enough? too much? not enough?
3. Have any of your personal behaviors changed because of any environmental information you've gained? What in particular really influenced you to change?
4. Have you, through school, parents, or other organizations, attended any environmentally related events? What do you remember from them? Did you change your behavior because of something you learned there?
5. What careers would you like to pursue? Have you learned anything about the environment that will impact your behavior in those careers?
6. From what media sources do you gain environmental information?
7. What environmental issues are you most interested in?
8. What information would you have to receive to get you to practice water conservation? Do you think conserving water is important?

The focus groups generated these insights:

- Students who attended the festival three to six years ago still remember some specific events, some because they were fun and some because they had a strong impact.
- Students who attended the festival felt more attention should be paid to environmental issues and conservation.
- Many students could list some changes they made, but few said they still practice these behaviors.
- The maintenance of new behaviors is dependent on parental role modeling at home and to a lesser extent, teacher interest, and follow-up in the classroom.
- A key impact of the festival is that it makes students aware that environmental problems exist in their own state. Students who did not attend the festival were more likely to claim Nebraska had no environmental problems that should concern them.
- Students had a variety of suggestions on how to make the festival more memorable: avoid lectures, create more hands-on sessions, give teachers follow-up activity ideas, partner with community organizations that can provide follow-up support for behavior change, and focus on what students can do to protect groundwater, not what farmers can do.

Source: Rensselaerville Institute for The Groundwater Foundation (1994).

- In what way?
- Was that always true?
- Can you explain that?
- Would you agree with that observation?

Finally, ask an ending question that helps bring closure to the focus group, reminds people of the great insights they have contributed, and asks for additional comments. You might phrase your closing question this way, for instance: “So it sounds like you are suggesting that our preschool programs represent a unique contribution to the community and set the stage for a solid elementary program. Is there anything else that comes to mind?” Then, wrap up your focus group by thanking participants for their helpful assistance.



3.16 APPLICATION EXERCISE

What questions could you ask during your focus group? Work on wording your questions to maximize discussion (focus on open-ended questions). Then put them in an order that flows well. Imagine that the responses are cryptic or shallow; what prompts could you use to draw more information from people? Imagine that some participants aren't saying much. What questions can you use to change their response pattern and give them an opportunity to speak? How will you open and close the discussion? Create a script or question guide for your focus group; the Focus Group Guide Checklist in worksheet 3.5 at the end of this chapter can help you as you develop your own question guide.

■ Pilot Testing

Focus group questions can be pilot tested as individual interviews to give you a sense of how the conversation will go, what will make useful prompts, and where questions might be confusing.

■ How Many and Which Respondents?

The mix of participants is not left to chance. Select focus group participants as purposefully as you would select interview participants. Members of each group should be similar enough that they feel comfortable speaking and don't start fighting, yet diverse enough to create an interesting and informative conversation. If you want to explore how youth perceive the nature center, you might invite teenage boys to one group and teenage girls to another. It is not necessary for everyone to agree. Differences of opinion are welcome, particularly if they are explained. Ideally, the discussion will prompt people to recall things they might not have

mentioned in an individual interview, and the combination of responses may help participants realize things they hadn't thought of before.

Focus group results are usually not projected to the population, because respondents are purposefully chosen and the questions tend to vary slightly from session to session. Personality differences can make each focus group quite distinctive. Because a focus group isn't easily replicated, there is neither an established minimum number of focus groups you should run nor number of people who should participate.

A general rule for determining the number of focus groups you need is to consider who is likely to be able to provide useful information. If the types of respondents differ on important dimensions (such as hunters and nonhunters), invite them to separate meetings. You should have at least two focus groups for each category. Continue to schedule focus groups as long as they are producing different types of information. Once people start saying things you've already heard, you are done.



3.17 APPLICATION EXERCISE

What types of people would you invite to your focus group? How many focus groups should you plan to do? How would you recruit participants?

■ Planning the Focus Group

When you know what types of folks you want to participate in your focus group, you need to contact them with an invitation. Select a focus group location that is pleasant and neutral and a time that is convenient for your participants. A public library, Extension office, or school (after hours) may be reasonable and available. If you can offer an incentive, make that known in the invitation. Food is often expected, and many focus groups are held over a meal time. (Some funders do not reimburse food expenses, however.) If you prefer to avoid meal-time meetings, you could provide a coupon for something practical (compact fluorescent light bulbs, a gift certificate to a store) or something appealing (homemade cookies). Send a letter confirming the meeting to all participants, and include a map and parking information. You may want to make a reminder call the day before.

Focus groups are usually led by a moderator and include a notetaker and recording device (a tape or video recorder). A skilled moderator will keep the discussion moving, ask probing and follow-up questions, drag information out of quiet people, and contain talkative

participants. As you plan the focus group, be sure to meet with the moderator, review the focus group questions, and explain the evaluation questions that you wish to answer with this tool.

■ Implementing the Focus Group

Bring snacks that won't make crunching and clinking sounds on the tape, and arrange the chairs so everyone can see and hear. Set up your notetaker so that he or she, too, can see and hear everyone. Make sure your recording equipment is positioned to capture all the discussion (a free-standing microphone is recommended), and be sure to bring along batteries or an extension cord. Test your equipment before people arrive to set the recording level appropriately.

As people arrive, thank them for coming and invite them to help themselves to snacks. If you can, try to seat the dominant personalities near the moderator and the shyer speakers directly across from the moderator. Let participants know about the recorder in a nonthreatening way, reassuring them that their names will not be used in any written report.

If you are not the moderator, your role may be to welcome everyone and listen. If you are seeking critical feedback, you shouldn't be present—participants need to feel free to say whatever they think and feel. If you are the moderator, do not get drawn into the conversation. Keep yourself free to monitor the conversation, engage the quiet folks, orchestrate transitions to new topics, and summarize what is said. Your job is to set the stage, introduce the purpose, ask the questions, and keep the conversation moving. You will want to allow for the pursuit of tangents, as long as they are relevant and helpful. You will want to stifle irrelevant tangents and stories. It is helpful to have an assistant to take notes, operate the recording equipment, change tapes, and refill snack bowls. Tapes should be labeled immediately.

One challenge to moderators who are also program experts is handling content questions that participants ask. The educator in you will want to provide an answer, but that could affect the information you get from the other participants. As hard as it is, such situations are best handled by placing a note in a “parking lot” of additional ideas, offering to respond after the close of the focus group, or directing the individual to another staff member who can provide a response at another time.

Thank people as you conclude the focus group, and provide their payment or incentive as soon as possible. The moderator and assistant should compare perceptions after the participants have departed, and you should plan to transcribe the tapes within three to five days, when the conversations are still fresh in your mind. Although you may refer to participants by name for ease of communication, remember to remove or change names to protect confidentiality. Analyze these qualitative data as suggested in



3.18 APPLICATION EXERCISE

Who could moderate your focus group?

Who could take notes?

Where could you hold it?

chapter 5.

■ Quality Assurance

Focus groups are useful evaluation tools when

- participants are appropriately chosen and willing to share their ideas;
- the moderator is well informed and skilled at generating conversation; and
- notes are synthesized into summaries and converted into recommendations for program improvement.

Final Thoughts on Tool Development

A variety of tools are available to evaluators to help them collect accurate, honest, and useful information to make decisions about environmental education programs. Only the most common and basic tools are described here. Each tool has advantages and disadvantages; they are not interchangeable, but by the same token there are no hard and fast rules that make one tool better than another. The most difficult aspect of creating your own tools is making sure they are reliable and valid. Box 3.9 includes a summary of these two concepts: *reliability* and *validity*.

The key in figure 3.7 helps summarize the evaluation purpose that may be best served by each of these tools and provides some broad guidance that may help educators who are new to evaluation identify the right tools to use. This key is only meant to guide you to consider a tool; many other resources can provide more details on the proper design of each of these and other tools (see Suggested Resources at the end of this workbook). The types of questions you design for an interview, survey, test, or focus group and the types of audiences that use the tool will have a large influence on whether the tool is appropriate for your evaluation. And the quality of the data that you obtain through each tool will be a function of the sample size and sampling procedure, the pilot test, the implementation process, and the data analysis. After you have developed, pilot tested, and revised your tools, you are ready to move to the next step in the evaluation process—collecting data! ■