

## WHAT ARE THE DIFFERENT PURPOSEFUL SAMPLING APPROACHES FOR SELECTING PARTICIPANTS AND SITES?

In qualitative inquiry, the intent is not to generalize to a population, but rather to develop an in-depth exploration of a central phenomenon. Thus, to best understand this phenomenon, the qualitative researcher purposefully or intentionally selects individuals and sites for data collection. This distinction between quantitative “probability sampling” and qualitative “purposeful sampling” is portrayed in Figure 7.1.

In quantitative research, the focus is on probability or random sampling, selecting representative individuals, and then generalizing from these individuals to a population. Often, this process results in testing “theories” that explain the population. However, in qualitative research, you select people or sites that can best help you understand the central phenomenon. This understanding emerges through a detailed understanding of the people or site. It can lead to information that allows individuals to “learn” about the phenomenon or to an understanding that provides voice to individuals who may not be heard otherwise.

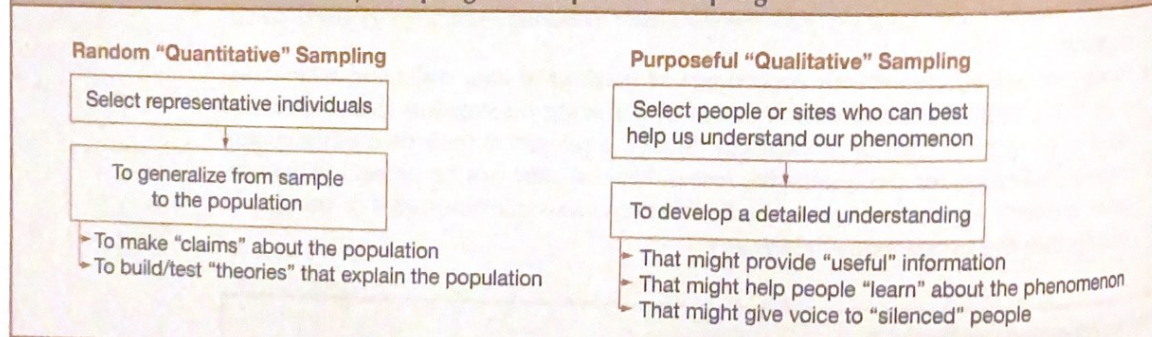
### Purposeful Sampling

The research term used for qualitative sampling is *purposeful sampling*. In **purposeful sampling**, researchers intentionally select individuals and sites to learn or understand the central phenomenon. The standard used in choosing participants and sites is whether they are information rich (Patton, 2015). In any given qualitative study, you may decide to study a site (e.g., one college campus), several sites (three small liberal arts campuses), individuals or groups (freshman students), or some combination (two liberal arts campuses and several freshman students on those campuses). Purposeful sampling thus applies to both individuals and sites.

If you conduct your own study and use purposeful sampling, you need to identify your sampling strategy and be able to defend its use. The literature identifies several qualitative sampling strategies (see Miles, Huberman, & Saldaña, 2014; Patton, 2015). As seen in Figure 7.2, you have a choice of selecting from one to several sampling strategies that educators frequently use. These strategies are differentiated in terms of whether they are employed before data collection begins or after data collection has started (an approach

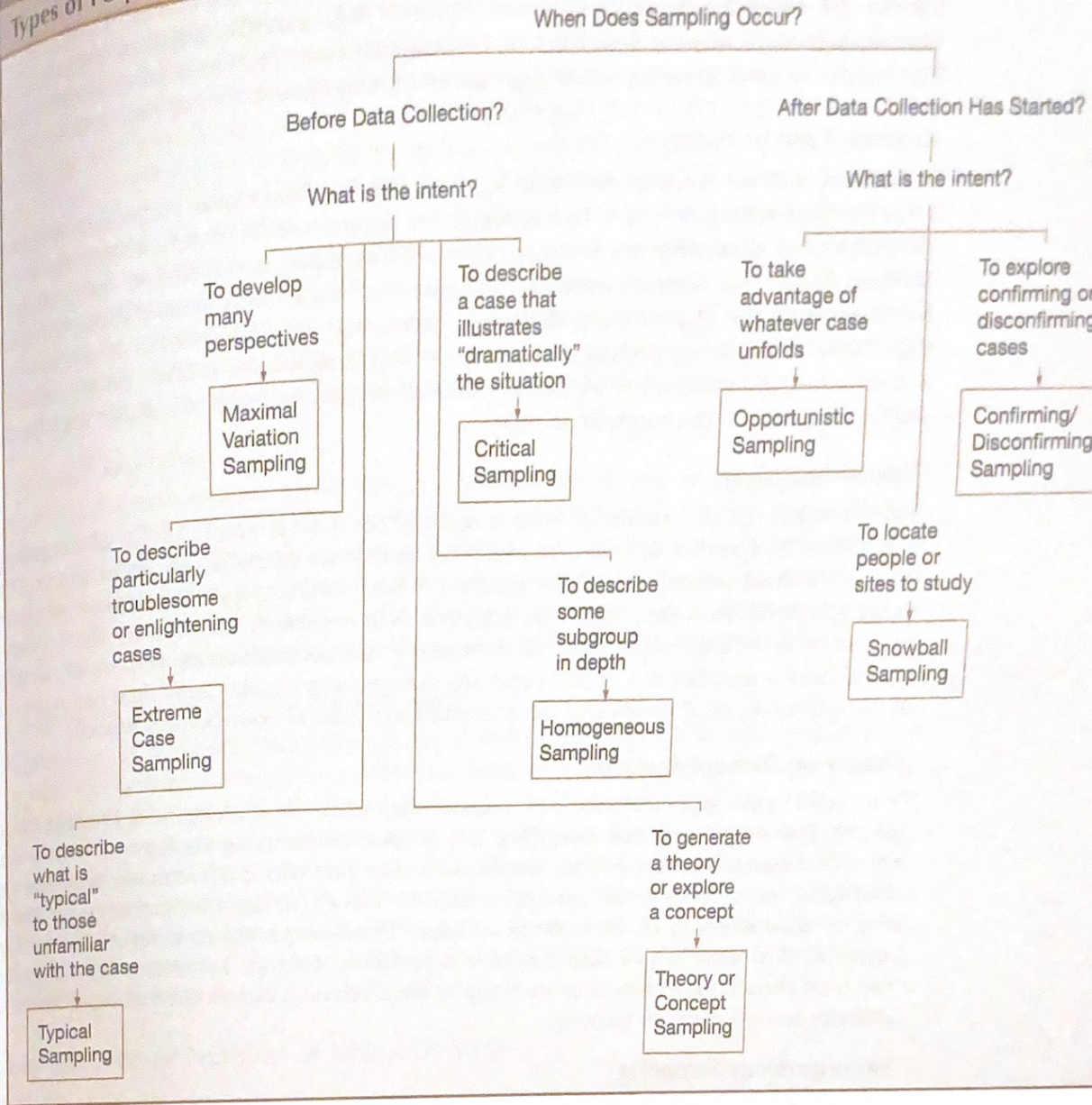
FIGURE 7.1

### Difference between Probability Sampling and Purposeful Sampling



**FIGURE 7.2**

**Types of Purposeful Sampling**



consistent with an emerging design). Furthermore, each has a different intent, depending on the research problem and questions you would like answered in a study. All strategies apply to sampling a single time or multiple times during a study, and you can use them to sample from individuals, groups, or entire organizations and sites. In some studies, it may be necessary to use several different sampling strategies (e.g., to select teachers in a school and to select different schools to be incorporated into the sample).

**Maximal Variation Sampling**

One characteristic of qualitative research is to present multiple perspectives of individuals to represent the complexity of our world. Thus, one sampling strategy is to build that complexity into the research when sampling participants or sites. **Maximal variation**

and usually has "insider" status at the site the researchers plan to study. Identifying a gatekeeper at a research site and winning his or her support and trust may take time. You might be required to submit written information about the project to proceed. Such information might include the following:

- Why their site was chosen for study
- What will be accomplished at the site during the research study (i.e., time and resources required by participants and yourself)
- How much time you will spend at the site
- What potential exists for your presence to be disruptive
- How you will use and report the results
- What the individuals at the site will gain from the study (Bogdan & Biklen, 2007)

Let's look at an example of using a gatekeeper in a qualitative study:

While conducting a qualitative study exploring the behavior of informal student cliques that may display violent behavior, a researcher talks to many high school personnel. Ultimately, the social studies coordinator emerges as a good gatekeeper. She suggests that the researcher use the school cafeteria as an important site to see school cliques in action. She also points out specific student leaders of cliques (e.g., the punk group) who might help the researcher understand student behavior.

### MyLab Education Self-Check 7.3

MyLab Education Application Exercise 7.2: Obtaining Permissions in a Qualitative Study

## WHAT TYPES OF QUALITATIVE DATA WILL YOU COLLECT?

Another aspect of qualitative data collection is to identify the types of data that will address your research questions. Thus, it is important to become familiar with your questions and topics and to review them prior to deciding on the types of qualitative data that you will collect. In qualitative research, you pose general, broad questions to participants and allow them to share their views relatively unconstrained by your perspective. In addition, you collect multiple types of information and may add new forms of data during the study to answer your questions. Furthermore, you engage in extensive data collection, spending a great deal of time at the site where people work, play, or engage in the phenomenon you wish to study. At the site, you will gather detailed information to establish the complexity of the central phenomenon.

We can see the varied nature of qualitative forms of data when they are placed into the following categories:

- Observations
- Interviews and questionnaires
- Documents
- Audiovisual materials

Specific examples of types of data in these four categories are shown in Figure 7.3. Variations on data collection in all four areas are emerging continuously. Most recently, video recordings, student classroom portfolios, and the use of e-mails are attracting increasing attention as forms of data. Table 7.1 shows each category of data collection listed, the type of data it yields, and a definition for that type of data. Now let's take a closer look at each of the four categories and their strengths and weaknesses.

**FIGURE 7.3****Compendium of Data Collection Approaches in Qualitative Research****Observations**

Gather fieldnotes by:

- Conducting an observation as a participant
- Conducting an observation as an observer
- Spending more time as a participant than observer
- Spending more time as an observer than a participant
- First observing as an "outsider," then participating in the setting and observing as an "insider"

**Interviews and Questionnaires**

- Conduct an unstructured, open-ended interview and take interview notes.
- Conduct an unstructured, open-ended interview; audio record the interview and transcribe it.
- Conduct a semistructured interview; audio record the interview and transcribe it.
- Conduct focus group interviews; audio record the interviews and transcribe them.
- Collect open-ended responses to an electronic interview or questionnaire.
- Gather open-ended responses to questions on a questionnaire.

**Documents**

- Keep a journal during the research study.
- Have a participant keep a journal or diary during the research study.
- Collect personal letters from participants.
- Analyze public documents (e.g., official memos, minutes of meetings, records or archival material).
- Analyze school documents (e.g., attendance reports, retention rates, dropout rates, or discipline referrals).
- Examine autobiographies and biographies.
- Collect or draw maps and seating charts.
- Examine portfolios or less formal examples of students' work.
- Collect e-mails or electronic data.

**Audiovisual Materials**

- Examine physical trace evidence (e.g., footprints in the snow).
- Video record a social situation of an individual or group.
- Examine photographs or video recordings.
- Collect sounds (e.g., musical sounds, a child's laughter, or car horns honking).
- Examine possessions or ritual objects.
- Have participants take photos or videos.

Sources: Creswell and Poth (2018) and Mills (2011).

**Observations**

When educators think about qualitative research, they often have in mind the process of collecting observational data in a specific school setting. Unquestionably, observations

answering the major research questions and forming an in-depth understanding of the central phenomenon through description and thematic development. Not all qualitative projects include both description and themes, but all studies include at least themes. Beginning with description, we can explore what it attempts to accomplish, how you might use it, and how it appears in a research report.

## Description

Because description is a detailed rendering of people, places, or events in a setting in qualitative research, it is easiest to start the analysis after the initial reading and coding of the data. In some forms of qualitative research design, such as in ethnography or in case studies, the researcher provides a considerable description of the setting. Developing detail is important, and the researcher analyzes data from all sources (e.g., interviews, observations, and documents) to build a portrait of individuals or events. To describe an individual, the qualitative analyst might ask, "What is this person like?" For describing a place, the question might be "What is this place like?" or "Where in the school do students go to smoke?"

In providing detailed information, description can transport the reader to a research site or help the reader visualize a person. It takes experience and practice to describe the detail in a setting. For example, examine these two illustrations and note the differences in level of detail:

- *Poor example.* The workers built the education building with three floors.
- *Better example.* As the education building developed, iron beams crossed and connected it together. A giant crane lifted these beams into place with a line secured tightly around each beam. A worker underneath the beam fastened it into place. As we watched, the beam tipped back and forth, leading us to wonder if the crane operator had securely fastened it. One slip and disaster would follow, but the beam landed securely in place.

Another good example is the following passage from a short story by Budnitz (2000). The author was writing about the common process of preparing pancakes:

He was mixing stuff up in a bowl; flour slopped over the edges and sprinkled on the counter and the floor. I'll have to clean that up, I thought. . . . There was butter bubbling and crackling in the frying pan. . . . He poured in the batter, it was thick and pale yellow; and the hissing butter shut up for a while. . . . There were two large lumpy mounds there, side by side, bubbling inside as if they were alive, turning brown on the edges. He turned them over and I saw the crispy undersides with patterns on them like the moon; and then he pressed them down with the spatula, pressed them flat and the butter sputtered and hissed. (pp. 91-92)

By reading vivid short stories or examining qualitative studies, you can find illustrations where writers used detail to take an ordinary experience (like pancake making) and transport you to the setting so that you can almost feel (or taste) the situation.

Elements of good description can be seen in a passage about a gunman entering a classroom on a college campus (Asmussen & Creswell, 1995). Figure 8.7 reports the events that happened 2 weeks following the gunman incident. The discussion of these events illustrates several features of description that you might include in your own qualitative description or note in a published research report.

The labels indicate the following:

- The passage starts broadly with the midwestern city and narrows to the campus, then the classroom, and, finally, the incident. This broad-to-narrow description helps

- The passage includes quotes to provide emphasis and realism in the account. These quotes are short, even one word (e.g., “disturbed”). They may be longer, such as a short phrase or a sentence, but in a brief journal article, writers need to be concerned about space available for the narrative and generally keep the quotes as short as possible.

## Themes

In addition to description, the use of themes is another way to analyze qualitative data. Because themes are similar codes aggregated together to form a major idea in the database, they comprise a core element in qualitative data analysis. Like codes, themes have labels that typically consist of no more than two to four words (e.g., “denial” or “campus planning”).

Through initial data analyses, you may find 30 to 50 codes. In subsequent analyses, you reduce these codes to five to seven major themes through the process of eliminating redundancies. There are several types of themes, and authors typically identify them as follows:

- *Ordinary themes.* Themes that a researcher might expect to find (e.g., “exposure to tobacco at school”).
- *Unexpected themes.* Themes that are surprises and not expected to surface during a study (e.g., “unenforced school tobacco use policies”).
- *Hard-to-classify themes.* Themes that contain ideas that do not easily fit into one theme or that overlap with several themes (e.g., “students gather in the park”).
- *Major and minor themes.* Themes that represent the major ideas and the minor, secondary ideas in a database. For example, a major theme might be “attempts to quit smoking.” Minor themes might be “physical reaction,” “peer pressure to continue smoking,” or “starts and stops.”

It might be helpful to examine themes that emerged during data analysis. Figure 8.8 is a portion of the discussion of the “safety” theme found in the gunman incident study (Asmussen & Creswell, 1995). The marginal annotations mark elements that are included in the theme. You might consider “safety” to be an ordinary theme because we may expect it to occur on campus. Several participants mention this theme, so the authors selected it and used participants’ exact wording. The authors analyzed their data for multiple perspectives on this theme of “safety.” The term **multiple perspectives** means that you provide several viewpoints from different individuals and sources of data as evidence for a theme. Multiple perspectives are important when conveying the complexity of the phenomenon in qualitative research.

In this passage, for example, the authors report the perspectives of the following:

- The chief student affairs officer
- University board members
- Campus security officers
- The counseling and psychological services office
- A professor on campus

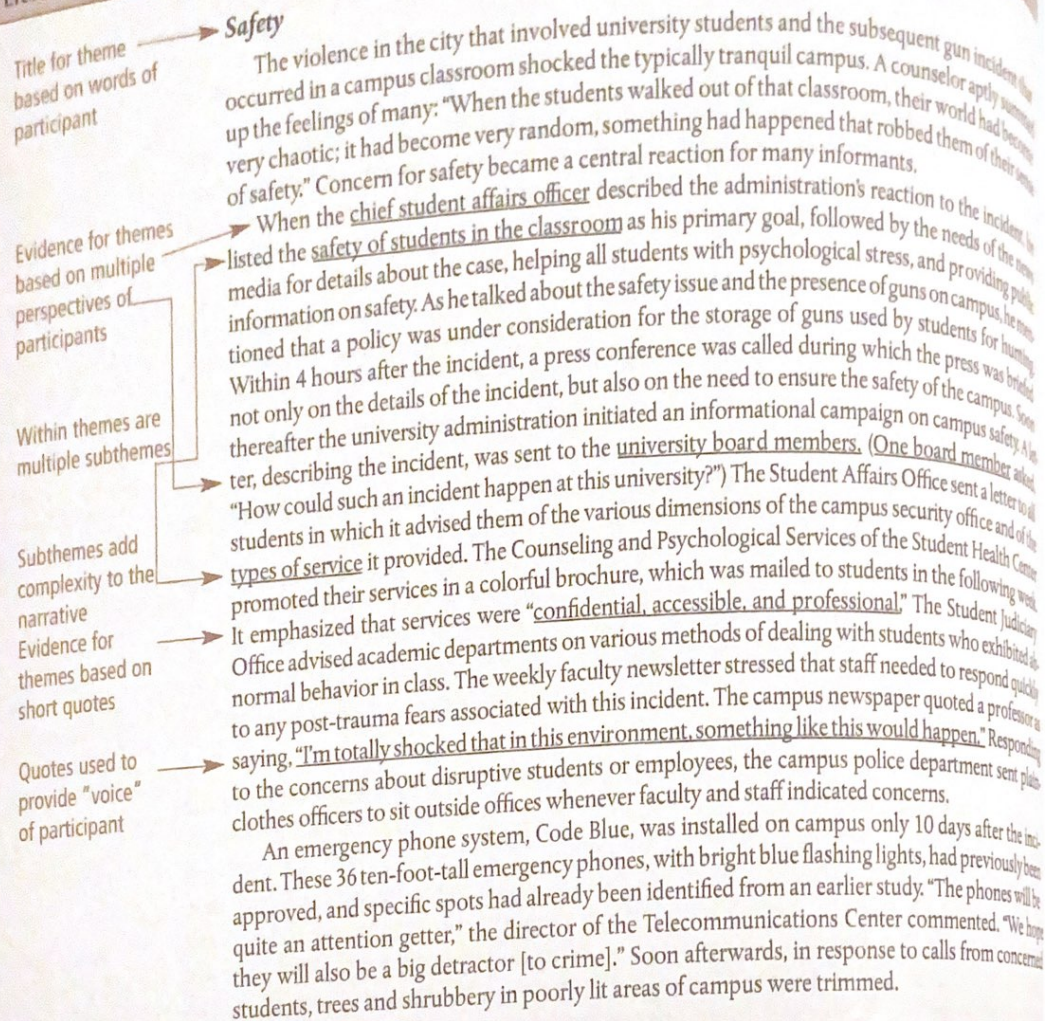
It is also useful to see that the authors have one major theme and several minor themes subsumed under the major theme. Diagrammed, this thematic development would be the following:

*Major theme.* Safety

*Minor themes (or subthemes).* Safety of students in the classroom; types of services

Finally, to add realism to this passage, the authors include short quotes from their interviews and newspaper accounts.

**FIGURE 8.8**  
Elements of Theme Development in a Narrative Passage



Source: Asmussen and Creswell (1995, pp. 582–583).

This passage does not include one further element of theme development. A real presentation of information does not present only one side or the other. In an attempt to capture the complexity of situations, qualitative researchers analyze data for **contrary evidence**. **Contrary evidence** is information that does not support or confirm the theme and provides contradictory information about a theme. What would this theme be? If the authors of the gunman case study searched for this evidence, they might have found that some students actually felt "safe" rather than concerned because the gunman was quickly or because they could outnumber the gunman.

One final point to note about developing themes is that you will reach a point where themes are fully developed and new evidence will not provide additional themes. **Saturation** is the point where you have identified the major themes and no new information can add to your list of themes or to the detail for existing themes. When you reach this point is a subjective assessment, but most qualitative researchers recognize the moment it occurs. In the development of the theme of "quit attempts in smoking"

the sidelines. From the islands, valleys, backwoods, and far reaches of the state came letters to the faculty senates, legislators, and newspapers. (p. 566)

- *Report quotes from interview data or from observations of individuals.* These quotes can capture feelings, emotions, and ways people talk about their experiences.
- *Report multiple perspectives and contrary evidence.* Identify these perspectives based on different individuals, sources of information, or multiple views held by one person.
- *Write in vivid detail.* Find good descriptions of an individual, event, or activity.
- *Specify tensions and contradictions in individual experiences.* For example, Huber and Whelan (1999) report the personal stories of a female teacher who experiences a lack of support about a special education student in the classroom. They discuss the tension this teacher feels between being in control in her classroom and the out-of-class pressure that she experiences from her school coordinator.

#### MyLab Education Self-Check 8.5

MyLab Education Application Exercise 8.4: Qualitative Data Analysis and Interpretation: Reporting Findings

## HOW DO YOU INTERPRET FINDINGS?

Interpretation involves making sense of the data, or the “lessons learned,” as described by Lincoln and Guba (1985). **Interpretation in qualitative research** means that the researcher steps back and forms some larger meaning about the phenomenon based on personal views, comparisons with past studies, or both. Qualitative research is interpretive research, and you will need to make sense of the findings. You will find this interpretation in a final section of a study under headings such as “Discussion,” “Conclusions,” “Interpretations,” or “Implications.” This section includes the following:

- A review of the major findings and how the research questions were answered
- Personal reflections of the researcher about the meaning of the data
- Personal views compared or contrasted with the literature
- Limitations of the study and suggestions for future research

### Summarize Findings

A typical “Discussion” section begins with a general recap of the major findings. Sometimes, you will state each individual research question again and provide findings for each question. The overall intent of this passage is to provide readers with an overview of the findings to complement the more detailed results in the description and theme passages.

### Convey Personal Reflections

Because qualitative researchers believe that your personal views can never be kept separate from interpretations, personal reflections about the meaning of the data are included in the research study. You base these personal interpretations on hunches, insights, and intuition. Because you may have been to the field and visited personally at great length with individuals, you are in a good position to reflect and remark on the larger meaning of the data. The two examples that follow illustrate the diversity of personal reflections found in qualitative studies.

In the classic ethnography of the “sneaky kid,” Wolcott (1983) reflected about the meaning of learning for Brad:

Learning—in the broad enculturative sense of coming to understand what one needs to know to be competent in the roles one may expect to fulfill in society, rather than in the narrow sense of learning-done-at-school—is an ongoing process in which each human engages throughout a lifetime. (p. 24)

The next example shows how researchers can offer interpretative commentary about new questions that need to be answered. In the discussion by Tierney (1993), who spoke with a 40-year-old African American on a university campus who had AIDS, the researcher left the interview with unanswered questions:

How do we create understandings across differences so that we are able to acknowledge and honor one another, rather than bring into question one another's legitimacy? It is incumbent on me as the author, then, to present these voices as fully and carefully as possible; at the same time, it is necessary for the reader or methodologist or administrator who does not understand these realities to try to come to terms with them. (p. 27)

### Make Comparisons to the Literature

Interpretation may also contain references to the literature and past studies. Similar to quantitative research, the qualitative inquirer interprets the data in view of this past research, showing how the findings may support or contradict prior studies or both. This interpretation may compare qualitative findings with reported views of a social science concept found in the literature, or it may combine personal views with an educational or social science term or idea. In a qualitative study of sibling interaction between a young man with Down syndrome and his three brothers, the authors Harry, Day, and Quist (1998) concluded with interpretive comments about the inclusion of “Raul” in situations outside of the family setting. They relate their own views to those in the literature:

We strongly believe, as does much literature on the topic . . . that the first requirement must be an inclusive and continuous school structure that keeps students with disabilities with their community and family peers from elementary school right through high school. (p. 297)

### Offer Limitations and Suggestions for Future Research

Also similar to quantitative research, the qualitative researcher suggests possible limitations or weaknesses of the study and makes recommendations for future research. These limitations may address problems in data collection, unanswered questions by participants, or better selection of purposeful sampling of individuals or sites for the study. Implications for future research may include the use of the findings for practice (e.g., classrooms, schools, or with certain people such as adults or teenagers) or the need for further research (e.g., by gathering more extensive data or by asking additional questions of participants). You might also state implications for decision making, such as for new practices (e.g., better campus planning about how to handle violent incidents) or for the audience you identified in the introduction to your study.

**MyLab Education Self-Check 8.6**

**MyLab Education Application Exercise 8.5: Qualitative Data Analysis and Interpretation: Interpreting Findings**